ENVIRONMENTAL MANAGEMENT SYSTEM

20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD

Seales Road Haulage Limited

Version:	1.2	**Date:**	14 September 2020		
Doc. Ref:	JUL-2670-A	**Author(s):**	IA	**Checked:**	SRH
Client No:	2670	**Job No:**	003		

KALEX
environmental consultants

Oaktree Environmental Ltd & Kalex Ltd

Waste, Planning & Environmental Consultants

Oaktree Environmental Ltd, Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
Tel: 01606 558833 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk
REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

Version	Issue date	Author	Checked	Description
1.0	18/12/2019	IA	CP	Internal Draft
1.1	10/01/2020	IA/CP	CP	Amended sections 1.5, 1.9, 2.5, 2.6, 2.10, 3.9, 4.2, 4.3, 4.7, 5.2, 5.5 & 6.4 in response to EA comments
1.2	14/09/2020	IA	IA	Amended section 3.9 and appendices

CONTENTS

DOCUMENT HISTORY: I
CONTENTS II
LIST OF TABLES IV
LIST OF APPENDICES: V
SITE INFORMATION & KEY CONTACTS LIST VI
1 GENERAL CONSIDERATIONS 1
1.1 SITE OPERATOR/PERMIT TYPE 1
1.2 RELEVANT CONTACTS 1
1.3 SITE INFORMATION AND LOCALITY 2
1.4 PERMIT AREA/WASTE MANAGEMENT OPERATIONS 2
1.5 HOURS OF OPERATION 3
1.6 WASTE STORAGE, TYPES AND QUANTITIES 4
1.7 EXEMPT ACTIVITIES 4
1.8 STAFFING AND MANAGEMENT 5
1.9 HEALTH AND SAFETY 5
1.10 FIT AND PROPER PERSONS 5
1.11 CONVICTIONS 6
1.12 WASTE CARRIERS 6
2 SITE ENGINEERING AND INFRASTRUCTURE 7
2.1 SITE LOCATION 7
2.2 SITE DESCRIPTION 7
2.3 ACCESS AND PARKING 7
2.4 SITE OFFICE 8
2.5 WEIGHBRIDGE 8
2.6 NOTICE BOARD AND SIGNS 8
2.7 SITE SECURITY 9
2.8 FUEL STORAGE 9
2.9 REJECTED WASTE 10
2.10 DRAINAGE 10
2.11 VEHICLES, PLANT AND EQUIPMENT 10
2.12 PREVENTATIVE MAINTENANCE (PLANT & EQUIPMENT) 11
3 SITE OPERATIONS 12
3.1 PRELIMINARY PROCEDURES 12
3.2 WEIGHING AND CATEGORISING LOADS 13
3.3 CHECKING IN & INSPECTION OF LOADS (GENERAL) 14
3.4 CHECKING IN & INSPECTION OF LOADS (INERT & EXCAVATION WASTE) 14
3.5 WASTE ACCEPTANCE PROCEDURE (INERT & EXCAVATION WASTE) 15
3.6 WASTE DEPOSIT & HANDLING 16
3.7 WASTE PROCESSING PROCEDURE 16
3.8 WASTE/PRODUCT REMOVAL AND EXPORT 18
3.9 AGGREGATES PROTOCOL 19
3.10 RECORD KEEPING 20
3.11 MANAGEMENT TECHNIQUES 22
3.12 SITE CLOSURE PLAN 23

4 ENVIRONMENTAL CONTROL, MONITORING AND REPORTING 24
4.1 SITE INSPECTIONS AND MAINTENANCE 24
4.2 CONTROL OF MUD AND DEBRIS 24
4.3 CONTROL OF DUST 25
4.4 ODOUR CONTROL 26
4.5 LITTER CONTROL 26
4.6 CONTROL OF PESTS, BIRDS AND OTHER SCAVENGERS 26
4.7 CONTROL AND MONITORING OF NOISE & VIBRATION 27
4.8 COMPLAINTS PROCEDURE 28
5 EMERGENCY & CONTINGENCY PROCEDURES 29
5.1 GENERAL 29
5.2 FIRE 30
5.3 BREAKDOWNS 31
5.4 SPILLAGES 31
5.5 DRUMS 31
5.6 ADVERSE REACTIONS 32
5.7 STAFF SHORTAGES 32
5.8 ADVERSE WEATHER CONDITIONS 33
5.9 CLOSURE OF DESTINATION SITES 33
5.10 OPERATIONAL FAILURE 34
5.11 BOMB SCARE 34
6 TRAINING FOR SITE STAFF 35
6.1 TRAINING NEEDS ASSESSMENT 35
6.2 SITE RULES AND INFRASTRUCTURE TRAINING 35
6.3 EMERGENCY PROCEDURES TRAINING 35
6.4 FIRE SAFETY / FIREFIGHTING TRAINING 36
6.5 RECOGNITION OF WASTE TYPES TRAINING 36
6.6 STORAGE AREAS / LIMITS TRAINING 37
6.7 VEHICLE / PLANT PREVENTATIVE MAINTENANCE TRAINING 37
6.8 DUTY OF CARE TRAINING 37
6.9 PLANT OPERATION TRAINING 38
6.10 PERMIT / MANAGEMENT SYSTEM TRAINING 38
6.11 TRAINING FOR CONTRACTORS 38

List of Tables

Table 1.1 - Permitted Operations 3
Table 1.2 - Staffing Levels 5
Table 2.1 - Plant & Equipment 11
Table 3.1 - Weight-Volume Conversion Factors for Typical Wastes Accepted at the Site 13
Table 4.1 - Noise Management Table 28

List of Appendices:

Appendix I - **Drawings**

Drawing No. JUL/2670/02 – Permit Boundary Plan

Drawing No. JUL/2670/03 – Layout Plan

Appendix II - Record Keeping Forms

FOR REFERENCE ONLY - OPERATOR MAY USE INTERNAL INSPECTION SHEETS OR THE FORMS WILL BE KEPT IN ELECTRONIC FORMAT

Appendix III - Copy of Environmental Permit

Appendix IV - Health & Safety – Conditions of Site Use for Staff and Visitors

Appendix V - Aggregates Quality Protocol

Site Information & Key Contacts List

Site Address:	20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD		
Site Operator:	Seales Road Haulage Limited	**National Grid Ref:**	TQ 54775 79720

CONTACT	DESCRIPTION	OFFICE HOURS	OUT OF HOURS
Peter Seales (Out-of-hours Emergency Contact)	Site Manager and TCM	01708 863110	07793 624 293
Thurrock Community Hospital Long Lane, Grays, Essex, RM16 2PX	Main NHS Hospital	0300 123 0808	999 or 112
Purfleet Care Centre Tank Hill Road, Purfleet, Essex, RM19 1SX	Local Doctor Surgery (GP)	01708 864 834	999 or 112
Essex Police (Grays Police Station) Brooke Road, Grays, RM17 5BX	Local Police Non-Emergency	101	999 or 112
	Police Emergency	999 or 112	999 or 112
Essex County Fire And Rescue Service Station 50 Grays, Hogg Lane, Grays, Essex, RM17 5QS	Fire and Rescue Service (in Emergency Dial 999)	01376 576840	999 or 112
Environment Agency 2 Marsham St, Westminster, London SW1P 4DF	Environment Agency Office	03708 506506	0800 80 70 60
Thurrock Council Civic Offices, New Road, Grays, RM17 6SL	Council Enquiries	01375 652 652	01375 372 468 or 999 or 112
Essex & Suffolk Water	Water Provider	0345 782 0999	0800 526 337 or 999 or 112
Thames Water	Sewerage Provider	0800 316 9800	0800 316 9800 or 999 or 112
Oaktree Environmental Ltd Lime House, 2 Road Two, Winsford, Cheshire CW7 3QZ	Specialist Advisor (Waste and Planning Issues)	01606 558833	999 or 112
Kalex Limited Bridge House, The Ash Little Hadham, Ware SG11 2DG	Specialist Advisor (Waste and Planning Issues)	07774 151 332	999 or 112

1 General Considerations

1.1 Site operator/permit type

1.1.1 Seales Road Haulage Limited operate a recycling centre that allows for the reception, storage, sorting and treatment of Inert and construction, demolition and excavation (CDE) waste. Recycled materials include will soils and hardcore. Non-recyclable general wastes will be bulked up and sent to an appropriately permitted site. The site is operated under an A16: Physical Treatment Facility Permit and in summary, the operations on site will include:

i) The importation of Inert & CDE wastes
ii) Separation of different elements of Inert & CDE waste into the various fractions which will be stored on site pending removal.

1.1.2 Waste will be accepted from members of the public and from the commercial and industrial sector.

1.1.3 The site is permitted for the acceptance of up to 250,000 tonnes a year of waste.

1.2 Relevant contacts

1.2.1 The contact details for site management are as follows:

Seales Road Haulage Limited 20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD	**Contact:**	Peter Seales
	Position:	Site Manager
	Tel:	07793 624 293

1.2.2 Oaktree Environmental Ltd and Kalex Limited have been engaged to act as consultants for Seales Road Haulage Limited to assist in the preparation of this Environmental Management System (EMS). This EMS has been prepared to meet the requirements of The Environmental Permitting (England and Wales) Regulations 2018 and the Environment Agency's Guidance: "*Develop a management system: environmental permits*".

1.2.3 The document was prepared by Oaktree Environmental Ltd. The Contact details are as follows:

Oaktree Environmental Ltd
Lime House
Road Two
Winsford
Cheshire CW7 3QZ

Contact: Isaac Allen
Position: Consultant
Tel: 01606 558833
E-mail: isaac@oaktree-environmental.co.uk

1.2.4 Ongoing compliance for the site will be handled by Kalex Limited. Contact details for Kalex Limited are as follows:

Kalex Limited
Bridge House
The Ash
Little Hadham
Ware SG11 2DG

Contact: Ian Bailey
Position: Consultant
Tel: 07774 151 332
E-mail: ian@kalex.co.uk

1.2.5 A full list of relevant contacts including emergency contact numbers are provided in the Site Information & Key Contacts List section in the pre-pages of this document.

1.3 Site information and locality

1.3.1 The site is located at 20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD as shown on Drawing No. JUL/2670/02. The national grid reference for the site is TQ 54775 79720.

1.4 Permit area/waste management operations

1.4.1 The permit boundary is outlined in green on Drawing No. JUL/2670/02. All references to 'the site' in this EMS shall mean this area and the associated infrastructure, plant and equipment.

1.4.2 The EP is required for the storage (keeping) prior to removal, and treatment (all types of handling/processing) of waste. Waste treatment processes which can be carried out on site will include the following:

- Sorting (with loading shovel/360° excavator or by hand)
- Screening (by using appropriate mechanical screening plant and equipment)
- Crushing (by using appropriate mechanical plant and equipment)
- Blending (by using appropriate mechanical plant and equipment)
- Separation (by using appropriate mechanical screening plant and equipment)

1.4.3 Specified waste management operations include waste disposal and waste recovery operations listed Annex IIA and IIB of The Waste Framework Directive 2008/98/EC; also shown in '*Table 1.1 - Activities*' of the EP which are shown below:

Table 1.1 - Permitted Operations

Table S1.1 activities	
Description of activities for waste operations	**Limits of activities**
R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) **R3:** Recycling/reclamation of organic substances which are not used as solvents **R5:** Recycling/reclamation of other inorganic materials	Treatment of wastes listed in table S2.1 consisting only of sorting, separation, screening, crushing, and blending of waste for recovery as a soil, soil substitute or aggregate. Secure storage of waste in table S2.1 pending treatment. Storage of wastes shall not exceed 40,000 tonnes in total at any one time. All permitted wastes shall be stored and treated on hardstanding, or on an impermeable surface with a sealed drainage system. No more than 250,000 tonnes of waste shall be treated per year.

1.5 Hours of operation

1.5.1 The site will be open during the following hours for the delivery and receipt of waste on site; including depositing, sorting, moving, storing and removing waste:

Monday to Saturday	06:00 – 18:00
Sunday	06:00 – 13:00
Bank holidays	CLOSED

Note: The site will not always be open and operating hours will vary depending on the amounts of waste needed to be treated.

1.5.2 Whilst there is no condition on the permit relating to operational hours it is proposed that the facility will provide a 24 hours service to highway works and utility contactors and therefore the facility may be operated 24 hours a day at any time.

1.5.3 The only other activities on site outside of these hours are maintenance works, general administrative duties and emergency processing due to unavoidable events such as staff shortages, plant breakdowns or poor weather conditions.

1.5.4 During times where the site is closed or not in operation, the site will be locked and secured to prevent unauthorised vehicular or pedestrian access.

1.6 Waste Storage, Types and Quantities

1.6.1 The locations of the operational and storage areas are shown on Drawing No. JUL/2670/03. The nature of operations at waste facilities means that certain operational areas may change depending on processing requirements.

1.6.2 The waste types handled on site will consist of dry, inert and non-hazardous construction, demolition and excavation waste as defined in the Controlled Waste (England and Wales) Regulations 2012 and Section 75 of the Environmental Protection Act 1990. A detailed breakdown of the waste types allowed for acceptance at the site will be shown in the EP which will appear in Appendix III of this document.

1.6.3 The site can accept a maximum of 250,000tpa and the storage of wastes shall not exceed 40,000 tonnes in total at any one time in accordance with the EP.

1.7 Exempt activities

1.7.1 Any waste which is stored under exemptions will be clearly labelled on the site plan and kept separate from those wastes on site which are permitted.

1.8 Staffing and management

1.8.1 The site will open for the deposit of waste or for other essential operations during the hours listed in Section 1.5. Table 1.2 below details the staff required when the site is operating at full capacity.

Table 1.2 - Staffing Levels

Position	Employees	Responsibilities
TCM	1	Management of the site
Transport Manager	1	Management of the site
Machine Operatives (360 excavator)	2	Waste handling/processing, reception, plant operation and general housekeeping
Machine Operative (Loading Shovel)	1	Waste handling/processing, reception, plant operation and general housekeeping
Yard Operative	1	Waste handling/processing, reception, plant operation and general housekeeping

1.9 Health and safety

1.9.1 All operations on site will be carried out in accordance with the relevant requirements of the Health and Safety at Work Act 1974. Conditions of site use for employees, visitors and contractors are shown in Appendix IV and will kept in the site office in paper or electronic format. These conditions will be shown to all site users and must be signed prior to using the site. Anyone refusing to comply with the conditions of use will be asked to leave the site.

1.10 Fit and proper persons

1.10.1 Peter Seales is the site's Technically Competent Manager (TCM) and will provide the required attendance time at the facility as required by guidance periodically issued by the EA. A copy of TCM's Certificate of Technical Competence (COTC) will always be made available in the site office.

1.10.2 The company, through the TCM, will ensure that a nominated deputy is sufficiently trained and familiar with the EP and this EMS document in addition to all relevant company procedures who, in the absence of the TCM, will act the competent person. If either the

TCM or deputy is changed or absent from the site, the EA will be informed of the change and the relevant details of the replacement as soon as possible.

1.11 Convictions

1.11.1 Seales Road Haulage Limited nor any of the relevant people within the company have been convicted of a relevant offence.

1.12 Waste carriers

1.12.1 Seales Road Haulage Limited hold an upper tier waste carrier; Ref. CBDU138664

2 Site Engineering and Infrastructure

2.1 Site location

2.1.1 The operation is located at 20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD as shown on Drawing No. JUL/2670/02. The National Grid Reference of the site is TQ 54775 79720 and will be leased to Seales Road Haulage Limited.

2.2 Site description

2.2.1 The site is located within an industrial area, which contains numerous industrial and business premises. The surrounding land use is a mixture of agricultural and industrial with the site in close proximity to the A1306 & A13. The nearest residential properties are approximately 380m to the east of the application site.

2.3 Access and parking

2.3.1 Access to the site is gained from Juliette Way to the east, as shown on Drawing No. JUL/2670/02.

2.3.2 Ample parking will be available adjacent to the main office for Seales Road Haulage Limited.

2.4 Site office

2.4.1 The site office is located on the adjacent operating centre. The documents listed below will be retained in the site office.

Documents to be retained in site office
The Environmental Permit (original & any subsequent variations)
This Environmental Management System (EA agreed document)
Current site diary (to record all inspections/visitors to the site)
Environment Agency inspection (CAR) forms
In-house inspection sheets/recording forms
Duty of care transfer notes (for 2 years minimum)
Duty of care product notes [(aggregates (for 2 years minimum)]
Hazardous waste consignment notes (rejected waste, etc., kept for 3 years)
Waste delivery tickets
Accident book (& 1st aid kit)

2.5 Weighbridge

2.5.1 The site has a weighbridge on site; however it is not operational. Wastes will either be weighed at the site of production or using the conversion factors provided in Section 3.2 of this EMS.

2.6 Notice board and signs

2.6.1 A notice board is erected at the site entrance and displays the following information:

- The site name and address.
- The name of the permit holder and operator.
- The Environmental Permit number and accompanying statement stating that the site is permitted by the Environment Agency.
- Environment Agency contact details, Emergency No. 0800 80 70 60 and
- General Enquires No. 03708 506 506.
- Operator's "out of hours" emergency contact details (07793 624 293).
- Operating hours.

2.6.2 Additional signs are displayed around the site for operational / health & safety purposes. All staff and visitors will be required to comply with the requirements of all signs whilst on site.

2.7 Site security

2.7.1 The site will benefit from 3m high perimeter fencing and sleeper / concrete walling with 2m high dust netting and lockable access gates. Site security infrastructure is clearly shown on Drawing No. JUL/2670/03 which is considered suitable to prevent any unauthorised access.

2.7.2 **CCTV system** - The site will have a 24-hour CCTV system which is remotely accessible and also monitored out-of-hours by a third party who are a UKAS accredited security monitoring company.

2.7.3 The site security will be inspected on a daily basis and any defects which impair the effectiveness of the security will be repaired to the same or better standard within a suitable timescale. All repairs will be noted on the site diary repaired as soon as practically possible. The checklist in Appendix II provides further information.

2.8 Fuel storage

2.8.1 The site will not store gas cylinders or aerosols and there will be no chemicals present on site.

2.8.2 The site will have a 3,000L Red Diesel tank stored on site as shown Drawing No. JUL/2670/03 and the following procedures will apply:

- The containers used for the storage of hazardous fluids will be surrounded by a bund capable of containing a minimum of 110% of the volume of fuel stored in the tank.
- All pipework and associated infrastructure will be enclosed within the bund.
- A lock will be fitted to the tank valve to prevent unauthorised operation.

- Any storage of oil will comply with the Control of Pollution (Oil Storage) (England) Regulations 2001 SI No.2954 or any subsequent legislation.
- All valves and gauges on the tank will be constructed to prevent damage caused by frost.
- The tanks will be clearly marked showing their capacity and product within.

2.9 Rejected Waste

2.9.1 Any waste which is rejected will be stored in a rejected waste skip and removed from the site the skip container is full. The location of this skip may vary as operating conditions permit (i.e. to permit the loading of rejected wastes but clear labelling and management control will ensure its use as specified). Rejected waste will be recorded on form SRH/RF/2 or similar.

2.10 Drainage

2.10.1 All waste is stored on a concrete surface and all surface water will either evaporate, be absorbed by the waste / materials on site or naturally drain from the site therefore the site complies with table S1.1 'activities' shown in the EP i.e. '*all permitted wastes shall be stored and treated on hardstanding, or on an impermeable surface with a sealed drainage system'*.

2.11 Vehicles, plant and equipment

2.11.1 Waste will be handled using the plant listed below. Additional plant will be hired to cover any very busy periods. Only trained operators will be permitted to drive/operate the plant listed below. Any changes to the list will be notified to the EA prior to implementation.

2.11.2 The plant available for use at the site is detailed in the table below.

Table 2.1 - Plant & Equipment

Item	Number	Function
360^0 tracked excavators	2	Loading/unloading/movement of waste
Loading Shovel	1	Loading/unloading/movement of waste
Viper SA9000	1	Processing/resizing of stone and aggregate
Powerscreen Warrior 1400x	1	Processing/resizing of stone and aggregate
Terex Powerscreen MetroTrak 2012	1	Processing/resizing of stone and aggregate
PT400 Terex	1	Processing/resizing of stone and aggregate

Note: The plant/equipment on site may vary and additional equipment may be hired-in to cope with larger jobs, jobs with specific requirements or to prevent over stockpiling leading to a breach of permitting conditions.

2.12 Preventative maintenance (plant & equipment)

2.12.1 All items of plant and equipment listed in Section 2.11 (and any additional items of plant which may be hired in to cover busier periods) are subject to preventative maintenance checks to ensure their safe operation and to prevent any potential situations which may give rise to faults or malfunction.

2.12.2 The plant and equipment on site and all vehicles in the fleet are subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts. In addition to this, site management and trained operational staff who use the mobile plant and equipment will undertake or delegate additional preventative maintenance checks before, during and at the end of each working day to ensure all plant and machinery is mechanically sound for use. These checks will be carried out using the Preventative Maintenance Checklist and any results which are flagged as needing attention will also be recorded in the site diary and actioned as soon as practicable.

3 Site Operations

3.1 Preliminary procedures

3.1.1 Guidance will be given by the site operator to all employees, sub-contractors, other waste carriers and customers regarding the waste types which are acceptable at the site (i.e. a copy of the relevant authorisations for the site such as the EP). Generally one contractor haulier is employed to bring the material to site but if however waste is to be accepted under sub-contractor or is delivered by other known hauliers then the carrier registration details will be taken prior to them being considered. All haulage operators bringing waste to the site will be periodically checked with the EA to ensure that they are registered. The procedures in Section 3.1.2 below would be followed prior to the receipt of waste on site.

3.1.2 When a driver employed by the permit holder arrives at the waste producers premises he/she will inspect the load for conformity with relevant regulations and safety procedures.

a) If the load is satisfactory the driver will sign the relevant paperwork (Duty of Care transfer note/delivery ticket) and remove the load from the premises.
b) If the waste does not meet the description stated on the controlled waste transfer note the customer is advised to check the note and give a more detailed description of the waste.
c) If the more detailed description of the waste reveals that the waste is not/permitted at the recycling centre then the customer is advised that the waste must be taken to another site which is appropriately permitted to accept the waste(s).

3.1.3 If further instructions are needed the driver may also report back to the site manager.

3.2 Weighing and categorising loads

3.2.1 The weight of each load into and out of the site will be weighed/estimated using the standard EA and WRAP agreed volume-to-weight conversion factors as found in

3.2.2 Table 3.1 below:

Table 3.1 - Weight-Volume Conversion Factors for Typical Wastes Accepted at the Site

Waste type	**Conversion Factors**	
	Tonnes/m3	**Tonnes/yd3**
Foundry Sand	1.60	1.22
Topsoil/subsoil	1.30	1.00
Clay	1.60	1.22
'Light' loads	0.46	0.35
Metals	0.42	0.32
Mixed builder's skips	1.20	0.92
Paper/cardboard	0.20	0.15
Tree cuttings	0.20	0.15
Glass	0.75	0.57
Industrial sweepings/general rubbish	0.63	0.48
Commercial sweepings/general rubbish	0.33	0.24
Waste packaging/containers	0.20	0.15
Wood	0.70	0.53
Green waste	0.75	0.58

3.3 Checking in & inspection of loads (general)

3.3.1 All incoming vehicles are required to report to the site office where their credentials can be checked prior to tipping. The details of the load will be recorded and the duty of care note/company documentation will be further checked by the operator to ensure that the load is acceptable at the site, including a visual check prior to the vehicle proceeding to the waste reception area shown on Drawing No. JUL/2670/03. Any deviation from the procedures or problems with any loads will result in tipping facilities being suspended for the offending company. Loads which are not acceptable within the above terms will be rejected and returned to the producer.

3.3.2 Once a load has been accepted the driver will be asked to unsheet the vehicle (if it is sheeted) and a visual inspection of the contents will be carried out to ensure that the material complies with the EP. If non-compliant waste is discovered before deposit, the load will not be accepted, the driver will be informed to leave the site and dispose of the material at alternative facility. In cases where the presence of unauthorised or unusual waste is discovered during initial inspection, the EA will be contacted immediately to agree a course of action.

3.4 Checking in & inspection of loads (inert & excavation waste)

3.4.1 Each load of material described as inert or excavation waste is assessed for visual signs of contamination such as plastic, glass or metal within the material. If a load is deemed unacceptable for purposes of creating quality aggregate then it will be returned to its source or directed to an alternative site.

3.4.2 Loads are also visually examined at the point of unloading. If they are found to be unacceptable, the load will be reloaded onto the delivery vehicle and undergo the actions stated in Section 3.2.2. If small levels of physical contamination are noted (plastics, wood, metal, etc.) they are handpicked and stored in the rejected waste skip prior to being removed off site.

3.4.3 If hazardous waste or suspected hazardous waste is deposited on the site, the material will be left alone with precautions taken to absorb any spillages and the area cordoned off. The EA will be contacted as a matter of urgency and the material left *in situ* until removed under the EA's instruction.

3.5 Waste acceptance procedure (inert & excavation waste)

3.5.1 For the protection of the operator and site supervisor any loads containing excavated soil i.e. EWC code 17 05 04 from an industrial site which could also include CDE sites, the waste must be accompanied by written documentation to demonstrate that the soil is not contaminated by way of waste analysis in line with the EA's Technical Guidance WM3 "Guidance on the classification and assessment of waste (1st Edition v1.1)".

3.5.2 To ensure that only non-hazardous wastes are accepted, the following information will be requested from waste producers (if relevant) at the start of each contract to ensure compliance with the EP and WM3:

i) A desk survey which has identified past uses of the excavation/construction site.
ii) A ground sampling plan including both surface and sub-surface sampling.
iii) Following analysis of the samples, an environmental / human health risk assessment which identifies areas of the site that require remediation or soil removal will be undertaken.
iv) Waste soil classification in line with WM3
v) All information relating to the site investigation was retained and passed to subsequent holders of waste.
vi) Name and address of the site where the waste was excavated/produced from
vii) Detailed waste description, including EWC code

3.5.3 The operator reserves the right to refuse such loads and contact the EA where necessary (prior to acceptance of the loads) to ensure that the load is acceptable.

3.6 Waste deposit & handling

3.6.1 Once a load has been accepted by the operator, the contents will be discharged into the appropriate reception, storage and treatment area as shown on Drawing No. JUL/2670/03.

3.6.2 The majority of wastes will be accepted under the following EWC codes:

- 17 01 07 - Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
- 17 05 04 - Soil and stones other than those mentioned in 17 05 03
- 17 09 01, 17 09 02 and 17 09 03
- 19 12 09 - Minerals (for example sand, stones)
- 20 02 02 - Soil and stones

3.7 Waste processing procedure

3.7.1 On site processing using mobile plant is required to produce material to the desired specification for re-sale on the commercial market.

3.7.2 Below shows the procedure of the treatment operations carried out on site:

SCREENER

a) Waste will be loaded into the feed hopper of the screening plant will be loaded using a 360^{o} tracked excavator or a loading shovel equipped with a bucket. This process will then separate the soil from the stone/hardcore.
b) The screening plant utilises a vibrating grid with evenly spaced vertical bars to separate out the different fractions within the material. Such screens have interchangeable mesh screens to permit the production of a wide range of product sizes (<3 mm to 20 mm).
c) Soil will be discharged into two different stockpiles depending on its size via conveyors.

d) The stone/hardcore material off the front conveyor of the screener should consists of stone/hardcore which will consist of a saleable aggregate. Larger items may then be transferred to the crusher.

CRUSHER

e) The bulky inert/stone waste will be loaded into the feed hopper of the crusher; this then passes into the crushing chamber which uses hydraulically operated jaws to reduce the size of the material.

f) Small feed/fines pass through the grid bars/mesh at the base of the crushing chamber and out of the plant via a small side conveyor with a discharge height of approximately 1.5 - 3.0 metres. The larger crushed material falls onto the delivery conveyor which will discharge the material in one of two ways: either onto a conveyor feeding the grid of the mobile screen or onto the ground to form a stockpile.

g) Before the crushed material exits the delivery conveyor (discharge height of up to 3.0 metres) any extraneous metal is extracted using a permanent overband magnet. If the material requires further grading after crushing the mobile screening plant used will have up to 3 discharge conveyors, forming 3 stockpiles of different product.

h) Small feed/fines pass through the grid bars/mesh at the base of the crushing chamber and out of the plant via a small side conveyor with a discharge height of approximately 1.5 - 3.0 metres. The larger crushed material falls onto the delivery conveyor which will discharge the material in one of two ways: either onto a conveyor feeding the grid of the mobile screen or onto the ground to form a stockpile.

i) Before the crushed material exits the delivery conveyor (discharge height of up to 4.0 metres) any extraneous metal is extracted using a permanent overband magnet. If the material requires further grading after crushing the mobile screening plant used will have up to 3 discharge conveyors, forming 3 stockpiles of different product.

j) The stockpiled material which is discharged from the crushing plant will be transferred to the appropriate storage areas by loading shovel.

3.8 Waste/product removal and export

3.8.1 When a collection vehicle arrives at the site to remove waste material or product, the driver will be instructed to report to the site office to confirm their identity. All relevant documentation will be completed and the vehicle will be passed to pick up the load and take it to the designated recycler/disposal site (if the outgoing material has not been fully recovered on site). The product or waste will then be loaded using the loading shovel.

3.8.2 The operational outputs and residues produced by the site and the disposal or recovery routes envisaged are detailed as follows:

a) Brick/rubble - for crushing to produce 6f5 aggregate or similar product under the site's Aggregates Protocol.
b) Some materials will not be recovered after processing (or will not be fit for use at recovery sites) such as clays and some soils. These materials may be disposed at suitably permitted landfill site.
c) Fines – as material for site restoration works on site or used as landfill cover.
d) Metals – metals removed from the overband magnet will be taken to a suitably permitted site for further recovery.
e) Rejected material will be removed from site as detailed in Section 2.9.
f) Waste unsuitable for processing will be sent to a suitably permitted site.

3.9 Aggregates protocol

3.9.1 The site processes hardcore and inert material in accordance with an aggregates protocol (provided in Appendix V of this document). All product/aggregates leaving the site will be accompanied with a product note.

3.9.2 To be able to demonstrate compliance with the Aggregates from Inert Waste Quality Protocol, the site will retain all documentation for every load of recycled aggregates sent out of the site and the correct information will be included. If information is missed or documentation not retained then the material will remain a waste and be sent to a suitably permitted site.

3.9.3 The inspection and testing including frequency and methods of tests for finished product shall be detailed and appropriate to the material end use, the quality of input material and the complexity of the waste recovery process. The stockpiles will be sampled and tested in accordance with sections B2.8 and B2.9 of WRAP Aggregate Quality Protocol and may be varied to ensure a controlled process depending on the amount of waste received i.e. daily.

3.9.4 Results of tests are required to meet the customer's specification and will be forwarded upon request. If further tests are required for assessment of suitability for a customer's specific end use, then the results shall also be retained.

3.9.5 **Mechanically processed soil** – As there is no end of waste for mechanically processed soil, every load of processed soil (arising from screening) leaving the site will have an accompanying waste transfer note with all recorded details shown below. Mechanically processed soil will be sent to suitably permitted disposal or recovery / restoration site.

3.10 Record keeping

3.10.1 Seales Road Haulage Limited use detailed waste transfer and product notes in paper and electronic form to ensure compliance with the Waste Duty of Care Code of Practice - March 2016 (Section 34(9) of the Environmental Protection Act 1990). The following points detail the correct information required in order to comply with the Waste Duty of Care Code of Practice which the operator will provide on all documentation:

- a written description of the waste which has been agreed and signed by the operator and the next holder. The description is part of the waste information the operator will provide.
- a statement confirming that the operator has fulfilled the duty to apply the waste hierarchy as required by regulation 12 of the Waste (England and Wales) Regulations 2011 (see Waste Hierarchy Guidance for England and Wales)
- the description of the waste is accurate and contains all the information required to ensure the lawful and safe handling, transport, treatment, recovery or disposal by subsequent holders, including classification of the waste by using the appropriate codes (referred to as the List of Wastes (LoW) or European Waste Catalogue (EWC)) - Appendix A of the Waste Classification Technical Guidance provides a list of the codes as well as advice on how to assess and classify waste.
- the quantity and nature and whether it is loose or in a container, if in a container, the type of container
- the time and place of transfer
- the SIC code of the transferor (current holder of the waste)
- the name and address of the transferor and transferee (person receiving the waste) and their signatures (the signature can be electronic as long as an enforcement officer can view it)
- the capacity in which the transferor and transferee are acting (e.g. as a producer, importer or registered waste carrier, broker or dealer) and their relevant authorisation to act in that capacity (e.g. their permit number or registration number)
- For non-hazardous waste this will be done by using:

- a paper WTN and form to fill in or alternative documentation e.g. an invoice, as long as it contains all the required information.
- a season ticket which is a single waste transfer note that covers a series of non-hazardous waste transfers. The season ticket will last up to one year and be used for regular transfers of the same type of non-hazardous waste with the same carrier. If the operator has several sites serviced by the same carrier with the same types of waste collected, these can be listed in a schedule to the season ticket. The operator will keep a record of the collection times and the quantity of waste.

3.10.2 A waste information note will not be required for non-hazardous waste if the waste holder does not change on the transfer of waste e.g. the waste is moved to other premises belonging to the same business. However, it is best practice that the business understands who has responsibility for that waste and a record is kept of internal transfers for audit purposes.

3.10.3 **Hazardous waste:** The site will not be accepting any hazardous waste into the site and if any hazardous waste or non-conforming waste is to be removed, it will be done so using a fully completed hazardous waste consignment note and sent to a suitably permitted site. The records of which will be kept for 5 years.

3.10.4 A summary of waste types and quantities deposited at and removed from the site and origin and destination details are then forwarded to the EA, with submission due within one month of the end of each quarter as below:

a) Quarter 1: January to March (due on or before 30th April)
b) Quarter 2: April to June (due on or before 31st July)
c) Quarter 3: July - September (due on or before 31st October)
d) Quarter 4: October - December (due on or before 31st January of the following year)

3.10.5 Outcomes of inspections of waste types, transfer/treatment areas, storage areas, drainage, infrastructure etc., will be recorded on-site inspection form and detailed comments will be entered into the site diary (including action taken or proposed). SRH/RF/4 (or similar).

3.10.6 Visitors to the site will sign the sites visitor's book located in the site office upon arrival stating the purpose of their visit and whom they represent.

3.10.7 Complaints will be recorded; SRH/RF/7 is included as an advisory. Section 4.9 demonstrates further action on the event of any complaints received.

3.11 Management techniques

3.11.1 All measures necessary to achieve a high level of protection of the environment and to ensure that the site is operated in accordance with this EMS and EP conditions will be strictly adhered to.

3.11.2 The manner in which the facility is managed is a critical element in ensuring emissions from the site operations are minimised. Therefore management of this facility will ensure:

a) staff are competent to manage and operate the facility i.e. fit and proper persons;
b) waste acceptance procedures are in place;
c) appropriate storage and handling procedures are in place;
d) waste/product despatch procedures are in place;
e) procedures and control techniques in place to minimise potential emissions to air, land and water;
f) there is an EMS, i.e. this document, in place to ensure standards are maintained, including incidents and complaints management procedures;
g) a communication programme is in place; and,
h) a health and safety programme is in place and is coherently conveyed to all staff and rigorously enforced throughout the whole of the organisation.

3.12 Site closure plan

3.12.1 In the event that the site ceases to operate as a waste transfer/treatment facility as set out in the site's EP, the following steps will be followed to achieve site closure:

a) Contact the EA to advise the Environment Officer(s) that the site is planned to cease / has ceased the acceptance of wastes under the permit.
b) The amount of residual processed and unprocessed waste on site will be assessed by the TCM to set a timetable for the final processing and timely removal of waste from site.
c) Following removal of all waste, plant and machinery from site a Site Investigation will be undertaken to ascertain the ground conditions of the land to which the site relates.
d) A surrender application will then be submitted to the EA for determination.

4 Environmental Control, Monitoring and Reporting

4.1 Site inspections and maintenance

4.1.1 The type and inspection frequencies for maintenance/housekeeping are listed on record form SRH/RF/4 as an advisory. The inspection form will be completed by a person who is familiar with the requirements of the EMS and EP for the site. All details of defects, problems and repairs carried out will be recorded on the form on the day that each event occurs. Detailed comments may also be recorded in a site diary. All repairs will be carried out as soon as practically possible.

4.1.2 All repairs to site security will take place as soon as practically possible and the site will be made secure until the repair has been carried out. Any major defects found during the daily site inspection will be repaired as soon as practically possible.

4.2 Control of mud and debris

4.2.1 Vehicles will be visually inspected before the exit to check that loads are safe and that no mud is carried onto the sites access road or surrounding highways on the wheels or bodies of HGVs. Visual inspections of the vehicle running surfaces at the site will be carried out daily and any problems will be immediately reported to the site manager.

4.2.2 Before exiting the site, all vehicles will be stopped and visually inspected by trained staff to reduce the risk of mud/debris being tracked off-site. If the member of staff inspecting the vehicle is satisfied, the vehicle is suitable to egress and will be directed to the exit. If the vehicle is not suitable to egress, the staff member will instruct site operatives to use the onsite pressure washer to hose down the wheels and bodies of vehicles. Following this, a final inspection will be carried out by the trained staff member before any vehicle can leave the site. If the vehicle still contains traces of mud and debris the process will be repeated until the vehicle is clear and the potential of mud being tracked onto roads is eliminated.

4.2.3 In the unlikely event that the material is deposited on the access road or public highway it will be treated as an emergency and will be cleared immediately by the operator using either a hose, brush and shovel or vacuum tanker/road sweeper if necessary. Silt will not be washed into roadside drains or gullies.

4.3 Control of dust

4.3.1 The primary measure to prevent dust escaping from the site is to ensure the stored waste and processing heights are below the height of the perimeter wall and mitigation which is 3m high walls with 2m high dust netting. Based on this, the waste will not exceed a storage and processing height of 5m.

4.3.2 In addition to the above, a number of dust mitigation measures are implemented on site including:

- Ensuring a constant supply of mains water is available for dust suppression during periods of windy and dry weather conditions (see section 5.8).
- sheeting of vehicles delivering waste to the site (if necessary);
- sheeting of vehicles transporting loads off site;
- use of a water feed around the perimeter to damp down stockpiles, vehicle running surfaces, vehicle loads and processing areas
- stockpiles will be kept to a minimum as operating conditions allow;
- drop heights **ALWAYS** minimised to prevent dust emissions;
- the crusher will be fitted with a water suppression system (Nozzle are mounted over the discharge belt);
- The site benefits from dust netting to prevent dust escaping beyond the site boundary.

4.3.3 **Emergency**: The site will subscribe to the Met Office to receive updated weather alerts. In the event of severe weather conditions i.e. high winds (i.e. >30mph) or long periods of dry weather (i.e. exceeding 3 major dry days), waste heights will be reduced or the waste will be removed off site. This ensures the operator can undertake a coordinated approach to reduce the likelihood of complaints.

4.3.4 All site operatives will be trained by site management in the use of onsite dust suppression methods. Training will be recorded on SRH/RF/6 and records will be stored within the site office. Site operatives will continuously monitor dust emissions whilst the site is in operation and will report back to the site supervisor for advice if required. The site supervisor will make a formal visual inspection of dust emissions throughout the day. Results of monitoring will be entered into the site diary/record forms.

4.4 Odour control

4.4.1 Strict turnaround times for any wastes which could give rise to odours will mean that the site will present a low risk of odour nuisance. If malodorous waste is deposited on site it will be consigned to the skip for rejected waste or removed from the site immediately.

4.5 Litter control

4.5.1 Given the nature of wastes accepted at the site (i.e. CDE waste), the risk of litter escaping the site boundary is deemed very low/negligible.

4.5.2 The greatest risk of litter would be during windy conditions. The site will be operated to a lesser degree during these conditions giving due regard to the potential effects of windblown litter.

4.5.3 Regular (minimum daily) inspections of the site boundary will be carried out for the presence of windblown litter and operatives will be instructed to collect the litter and place it in a skip for disposal/recovery before the end of the working day. In any event, all light waste will be placed in skips before the end of the working day. Staff carrying out litter picking duties will record their findings on SRH/RF/4 and report to the site manager.

4.6 Control of pests, birds and other scavengers

4.6.1 It is unlikely that vermin will present a problem, due to the waste types handled at the site, but a recognised pest control contractor will be brought in within 48 hours if any

problems are encountered. The site will be inspected daily for the presence of vermin and the results of the inspection noted in the site diary or site inspection form.

4.7 Control and monitoring of noise & vibration

4.7.1 The location, surrounding industrial uses and the partially enclosed nature of the site means noise associated with the operations will not greatly increase the existing noise level in the surrounding area. The waste operations will be carried out using the best practicable means at all times.

4.7.2 The likely sources of noise arising from the development; and, the actions to be taken / procedures to be followed or planned in order to prevent or minimise levels are shown on the table overleaf.

Table 4.1 - Noise Management Table

Potential Noise Source	Action to be taken to prevent or minimise noise
HGVs travelling to and from the site for delivery /collection of wastes /products.	• Management will ensure that all site vehicles operated by Seales Road Haulage Limited are functioning suitable i.e. vehicles must be well maintained and operated with silencers and moving parts to be regularly lubricated. • A maximum speed limit of 5mph will be maintained. • Drivers will be informed to turn off engines when the vehicle is not in use and no revving of engines will be permitted at the site. • The waste / product will be stored within bays along the site boundaries, the bays will provide screening to the activities and reduce the amount of noise leaving the site. • All vehicles will benefit from white noise reverse alarms.
Loading/unloading of waste delivery vehicles	• Drop / loading heights will be kept to a minimum to prevent excessive noise. • Only one vehicle will be loaded at a time. • Plant operatives will be instructed / trained to not scrape or bang the loading shovel bucket on the floor creating noise/vibration prior to deposit. • The waste / product will be stored within bays along the site boundaries, the bays will provide screening to the activities and reduce the amount of noise leaving the site.
Operation of screening plant and crushing plant	• Any malfunctions in plant i.e. missing screws/bolts which result in excessive noise will be de-commissioned until an alternative part of the plant is sourced or repaired. • Drop heights into the feed hopper will be reduced to a minimum. • The plant will only operate during the hours shown in section 1.5.1.
Operation of loading plant (i.e. telehandler/360)	• Drop heights will be kept to a minimum to reduce noise / vibration. • Management will ensure that all loading plant operated by Seales Road Haulage Limited is functioning suitably i.e. moving parts to be regularly lubricated. • Operatives will be informed to turn off engines when the plant is not in use and no revving of engines will be permitted at the site. • Any malfunctions in plant i.e. missing screws/bolts which result in excessive noise will be decommissioned until an alternative loading plant sourced. • The waste / product will be stored within bays along the site boundaries, the bays will provide screening to the activities and reduce the amount of noise leaving the site.
Small vehicles travelling to and from the site (e.g. staff and visitor's cars, courier van deliveries etc.)	• All those working on and visiting the site to be made aware of need for considerate driving and keeping vehicles well maintained. • Small vehicles will arrive marginally earlier than the main site operating hours.

4.8 Complaints procedure

4.8.1 All complaints are recorded on form SRH/RF/7 and will include a record of the complaint, particulars of the complainant and details of any action taken to alleviate the problem.

5 Emergency & Contingency Procedures

5.1 General

5.1.1 In addition to obligations imposed by RIDDOR '13 (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013) the permit holder will notify the EA of any serious injuries to employees of Seales Road Haulage Limited, other site users or members of the public arising as a result of operations on site. Minor injuries such as cuts and grazes etc. will be recorded in the accident book on site. Separate procedures will be used for different types of emergency. An emergency at the site is defined by the site management as follows:

"Any incident which is likely to result in harm to human health or pollution of the environment or serious breach of permit conditions and serious detriment to the amenities of the locality."

5.1.2 For all emergency situations, the deposit of any further waste will be suspended where necessary to allow action to be taken safely. If necessary, staff and other users of the site will be evacuated to an area which is a safe distance away from the hazards. Staff handling the emergency will be provided with and trained to use the necessary PPE (personal protective equipment) unless the manager instructs them that the hazard is too severe and outside help is needed from the emergency services or specialist waste contractors. A visitor's book will be kept to check who is on site at all times.

5.2 Fire

5.2.1 No waste will be burnt and no fires will be allowed on site. In the event of a fire occurring on site, the operator/site supervisor will exercise his judgement and extinguish the fire with the water hose or suitable fire extinguisher and/or call the fire service for assistance. Any fires will be reported to the EA on the working day that they occur. All staff will be evacuated from the site if necessary. Smoking is not permitted on site. Firefighting residues will be disposed of to a permitted waste management facility.

5.2.2 The following actions will be taken if a fire is detected or suspected (Site operatives):

a) DON'T PANIC
b) RAISE THE ALARM (IF NOT DONE SO ALREADY)
c) NOTIFY THE SITE MANAGER (IF SAFE TO DO SO)
d) DO NOT TRY TO TACKLE THE FIRE YOURSELF UNLESS YOU ARE TRAINED IN DOING SO AND YOU ARE SURE OF THE NATURE AND SOURCE OF THE FIRE
e) LEAVE THE SITE USING THE MAIN ACCESS GATES AS QUICKLY AND AS ORDERLY AS POSSIBLE
f) ASSEMBLE AT THE SPECIFIED FIRE ASSEMBLY POINT WHICH IS LOCATED BY THE SITE ACCESS GATES.
g) THE SITE MANAGER OR DELEGATED OPERATIVE WILL BE IN CHARGE OF CALLING THE EMERGENCY SERVICES ON A999" AND ENSURING THAT ALL PERSONS WHO WERE WORKING ON THE SITE OR WHO SIGNED IN TO THE VISITOR'S BOOK ARE ASSEMBLED SAFELY
h) INFORM ALL NEIGHBOURING PREMISES WHO ARE LIKELY TO BE AFFECTED
i) INFORM THE ENVIRONMENT AGENCY
j) DO NOT RETURN TO THE SITE UNTIL YOU HAVE BEEN GIVEN THE ALL CLEAR BY THE EMERGENCY SERVICES AND THE SITE MANAGER

5.3 Breakdowns

5.3.1 In the event of plant breakdowns, alternative plant will be sourced until the existing plant is repaired to prevent potential over stockpiling of waste. If an alternative plant cannot be used then waste will be stored securely until the plant is repaired and if necessary, waste will be diverted to an alternative site. The repair will be carried out at the most convenient location with absorbents used to clear oil or fuel spillages; most likely on the concrete surface.

5.3.2 Essential spares for plant maintenance are kept on site to ensure a repair can be carried out efficiently.

5.4 Spillages

5.4.1 Fuels stored on site will be contained within a bunded receptacle/container to contain any primary leaks. If any oil and vehicle maintenance chemicals are kept on site, they will be stored securely. In the event of a spillage a spill containment kit (absorbent pads, booms or granules) will be used to prevent further spillage and the contaminated absorbents placed in a skip for disposal to a suitably permitted facility.

5.4.2 All site surfaces will be inspected daily for the presence of spillages when the site is in operation. Debris will be swept as required and placed in a skip for further processing on site and sent to a suitably permitted site.

5.4.3 All wastes liable to give rise to contamination will be removed from the site within an EA agreed timescale.

5.5 Drums

5.5.1 The deposit of drummed waste will not be allowed at the site. If a drum is concealed within a skip and is not observed until the skip is deposited in the waste reception area then the following procedure will apply:

a) The staff member will visually check the condition of the drum from a safe distance, noting any labels referring to the possible contents or hazards.

b) The site manager will be contacted to verify the observations and to decide on further action.

c) The producer of the waste and the EA will be contacted for advice and further information if necessary and both will be informed that a breach of the Duty of Care and site permit conditions has occurred as the result of the unauthorised deposit.

d) No further waste will be deposited until the emergency has been dealt with.

e) All spillages will be cleared using a spill containment kit and all contaminated absorbents placed in a skip for disposal to a suitably permitted waste management site. Spill containment kits will be stored at the site entrance and checking for spillage incidents forms part of the daily inspections.

f) If the deposit results in serious reactions with other waste or harmful emissions or the drum contents cannot be identified, then the emergency services and/or specialist waste contractors will be brought in to assist. If necessary, staff will be evacuated from the site or to a safe area within the site and all occupants of neighbouring properties will be informed.

5.6 Adverse reactions

5.6.1 No wastes are accepted which will react to present such a hazard. If unauthorised waste is found in a load and does present such a hazard the same procedures as for the deposit of drums (above) shall apply.

5.7 Staff shortages

5.7.1 In the event of unforeseen staff shortages arising from illness, suspension or no shows, the operator will make a judgement whether to reduce the number of incoming loads and divert material to an alternative site. The operator will then seek further employment within a timely manner to ensure the site can continue to operate at its required capacity.

5.8 Adverse weather conditions

5.8.1 **High winds** - There will be no sorting, processing or treatment of any wastes which are likely to be blown around during conditions of high winds. Vehicles leaving the site will be sheeted to comply with the requirements of the Duty of Care legislation.

5.8.2 **Poor visibility** - The site will not operate in conditions of poor visibility such as dense fog to reduce the risk of vehicle collision.

5.8.3 **Droughts / warm weather** – The site would source further dust suppression equipment i.e. bowser, dust cannons if dust became a nuisance due to these weather conditions.

5.8.4 **Long periods of rainfall or flood events** – Due to the site's concrete surface and potential for mud tracking off site. Vehicles will undergo a stringent check and vehicle chassis would be sprayed using the onsite pressure washer to reduce the risk of mud tracking off site. If this isn't suitable, the operator would source a road sweeper until weather conditions improve.

5.8.5 The operator will set up a notification alert with the Met Office to receive prior notifications of the above unforeseen adverse weather conditions to ensure mitigation can be put in place prior to the event. The site may be forced to close during events which could cause a significant risk to staff, human health or the environment.

5.9 Closure of destination sites

5.9.1 In the event of destination site closures or seasonal demands for wastes leading to a longer storage duration, the operator can divert incoming waste and send stored waste to alternative sites or use the EA's public register to search for alternative sites who could take this material and then contact the destination site. The operator has more than one contract set up for outlets of material to plan for this event.

5.10 Operational failure

5.10.1 The manager will be contacted by staff in the event of any operational failure such as the breakdown of plant, systems or equipment and will decide whether operations are to continue or be suspended prior to corrective action being taken. Serious operational failures, which result in the closure of the site, will be recorded in the site diary.

5.11 Bomb scare

5.11.1 In the unlikely event of a bomb scare, the site will be evacuated and the police contacted. The police will then assume control of the site until the threat has been verified or the device defused and removed. The EA will be kept informed of the events on site.

6 Training for Site Staff

6.1 Training needs assessment

6.1.1 All new and existing site staff are subject to a specific training regime based on their responsibilities to ensure all operations are carried out without harm to the environment or amenity of the surrounding area. Training in all aspects of the site and waste operations at the site with regard to the individual responsibilities of the site staff will help to prevent incidents occurring which may have an adverse impact on the environment and/or the employees and their co-workers.

6.1.2 An employee training record SRH/RF/6 is provided in Appendix II which details a list of the training needs of all new site staff and also serves as a training review for existing site staff which will be carried out annually or a period set at the operator's preference.

6.2 Site rules and infrastructure training

6.2.1 This information is provided to all employees, visitors and contractors with a full understanding of the site's conditions of use, which is communicated and documented at induction for all staff with specific induction for visitors and contractors.

6.2.2 Competency should be demonstrated within this field to ensure the employee is fully aware of the site's surroundings and operations to ensure their safety and compliance with specific operating conditions at the site.

6.3 Emergency procedures training

6.3.1 All employees are required to be familiar with the Environmental Controls in Section 4.0 and the Emergency Procedures as detailed in the Section 5.0.

6.3.2 In addition to normal operating conditions as specified in the site rules, employees must also be trained in dealing with eventualities which may occur outside the scope of normal

operating conditions, so they are aware of how to deal with these situations in advance of an occurrence.

6.4 Fire safety / firefighting training

6.4.1 Management must provide all employees with appropriate fire safety training with regard to their individual responsibilities.

6.4.2 Emergency procedures detailing what measures employees should adopt should a fire occur at the site are detailed in Section 5.2 and are covered by the 'emergency procedures' training (see Section 6.3).

6.4.3 Regular fire drills are undertaken by site management to ensure proper procedures are followed by employees in the unlikely event that a fire incident occurs**.** These will be unannounced drills and will not form part of the induction or review training as specified in Section 6.1.

6.4.4 All training in relation to fire will be undertaken by site management who have been trained by a suitable Fire Risk Consultant. All training records will be kept within the site office.

6.5 Recognition of waste types training

6.5.1 All employees are given induction training and subsequent regular training to identify those waste types which are permitted for acceptance at the site under the site's EP and those wastes which are not. This will include specific training to identify those common wastes which may be found following deposit and are not permitted at the site and will also include more obscure wastes and how to handle these wastes safely. All employees are advised that they should refer any unrecognisable or unknown wastes to senior management, who should, in turn, follow procedures outlined in the EMS and/or contact the EA to agree a suitable method for removal.

6.5.2 Training is provided to all site users who handle waste on site and those in charge of administration and reporting. In-depth training will also be provided to drivers responsible for collecting wastes from the site of production in accordance with Section 3.0. They will be trained to identify any wastes not covered by the EP for the site and inform the producer that an alternative facility must be sought for any non-compliant wastes.

6.6 Storage areas / limits training

6.6.1 Those employees who carry out their responsibilities at the site and those in senior posts must be trained to identify appropriate waste storage areas to ensure that waste storage operations comply with the requirements of the EP for the site.

6.6.2 Employees in these roles must also be trained to recognise storage limits to ensure that they are in accordance with those specified in Section 1.6.

6.7 Vehicle / plant preventative maintenance training

6.7.1 This training is provided specifically for the vehicle and plant operators in order to ensure that all plant and machinery is checked regularly to prevent any occurrences which may lead to any adverse impacts on the environment or human health.

6.7.2 Training will be in accordance with Section 3.9 of this document and will be based on the preventative maintenance schedule supplied by the plant/equipment manufacturer.

6.7.3 The same training will be provided to senior management enabling a dual-level maintenance programme.

6.8 Duty of care training

6.8.1 All employees dealing with consignments of waste are trained in the completion of Duty of Care Waste Transfer Notes and the appropriate auditing of destination sites and/or contractors to ensure compliance.

6.9 Plant operation training

6.9.1 Any employees who are required to operate loading or treatment plant for the movement or processing of waste will be required to undertake the necessary qualifications for the operation of the specific item of plant in question. This will be required prior to operating the plant and will be obtained through necessary external certification programmes.

6.9.2 Regardless of general plant operation certification, all operatives will be fully inducted in the operation of the specific make and/or model of plant used on site.

6.10 Permit / Management System training

6.10.1 All employees will be inducted into the operating conditions as prescribed in the EP for the site. Whilst much of the above training will provide specific guidance on many aspects of these documents, all employees will be made aware of the location of the EP and EMS in the site office. All managerial positions will be made fully aware of the site's operating conditions.

6.11 Training for contractors

6.11.1 General site training will be provided to any contractors who are working on the site on a temporary basis as described in Sections 6.2, 6.3 and 6.4 above.

6.11.2 Additional training will be provided to contractors in their area of expertise. If they are dealing with specific items of plant/machinery, site operating conditions and a general understanding of the EP conditions will be provided to prevent any adverse impacts on the environment.

Appendix I

Drawings

Scale Bar (1:25,000)

0 km 1 km 2 km

NOTES

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev	Date	Init:	Description:
-	09.12.19	CP	Initial Drawing

KEY:

Site location

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

DRAWING TITLE
SITE LOCATION MAP

CLIENT
Seales Road Haulage Ltd

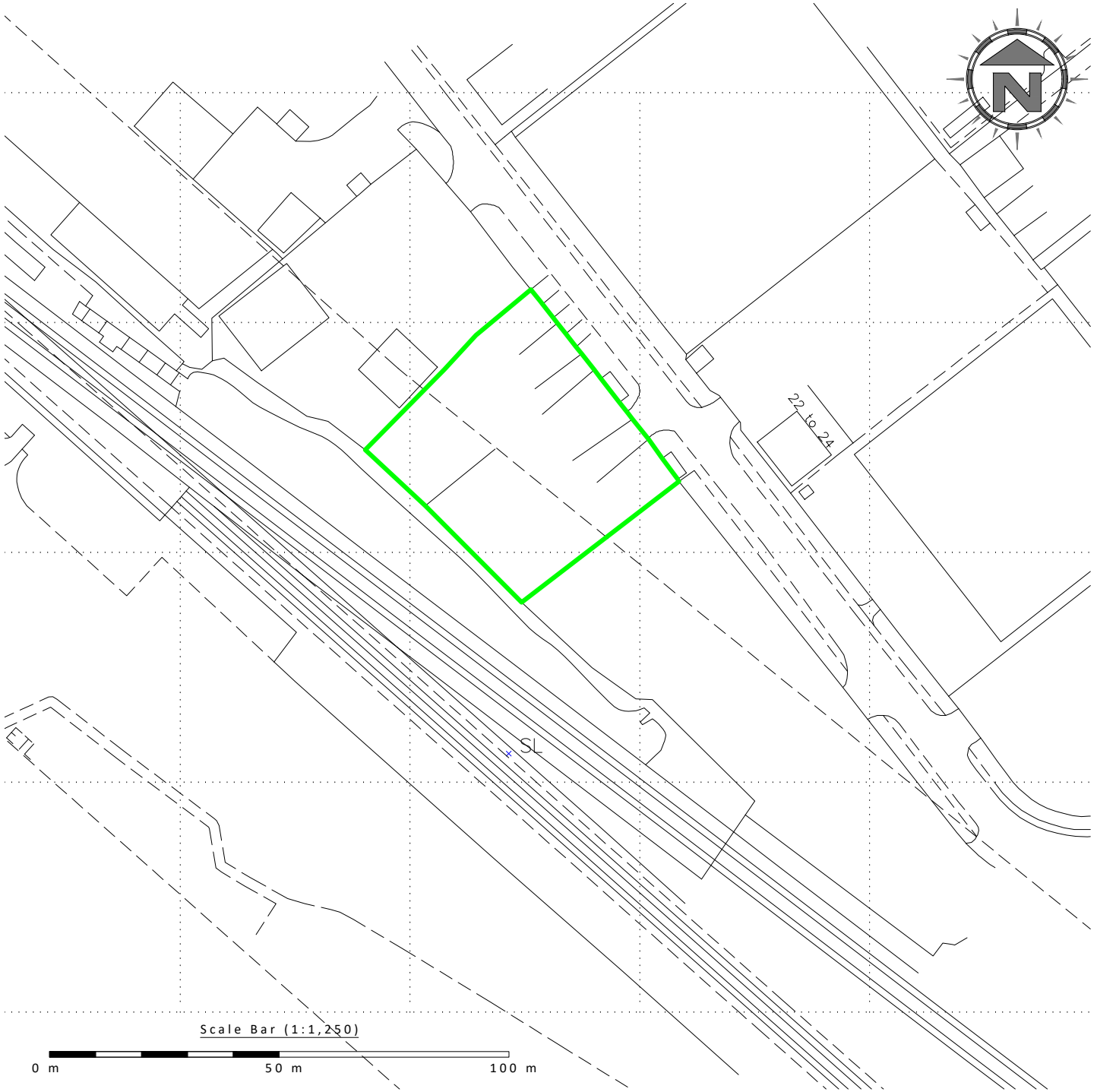
PROJECT/SITE
20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex RM15 4YD

SCALE @ A4	JOB NO	CLIENT NO
1:25,000	001	2670

DRAWING NUMBER	REV	STATUS
JUL/2670/01	-	Issued

DRAWN	CHECKED	DATE
CP	--	09.12.19

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk



NOTES

REVISION HISTORY

Rev	Date	Init:	Description:
-	27.11.19	CP	Initial Drawing

KEY:

Permit boundary

Oaktree Environmental Ltd

Waste, Planning and Environmental Consultants

DRAWING TITLE

PERMIT BOUNDARY PLAN

CLIENT

Seales Road Haulage Ltd

PROJECT/SITE

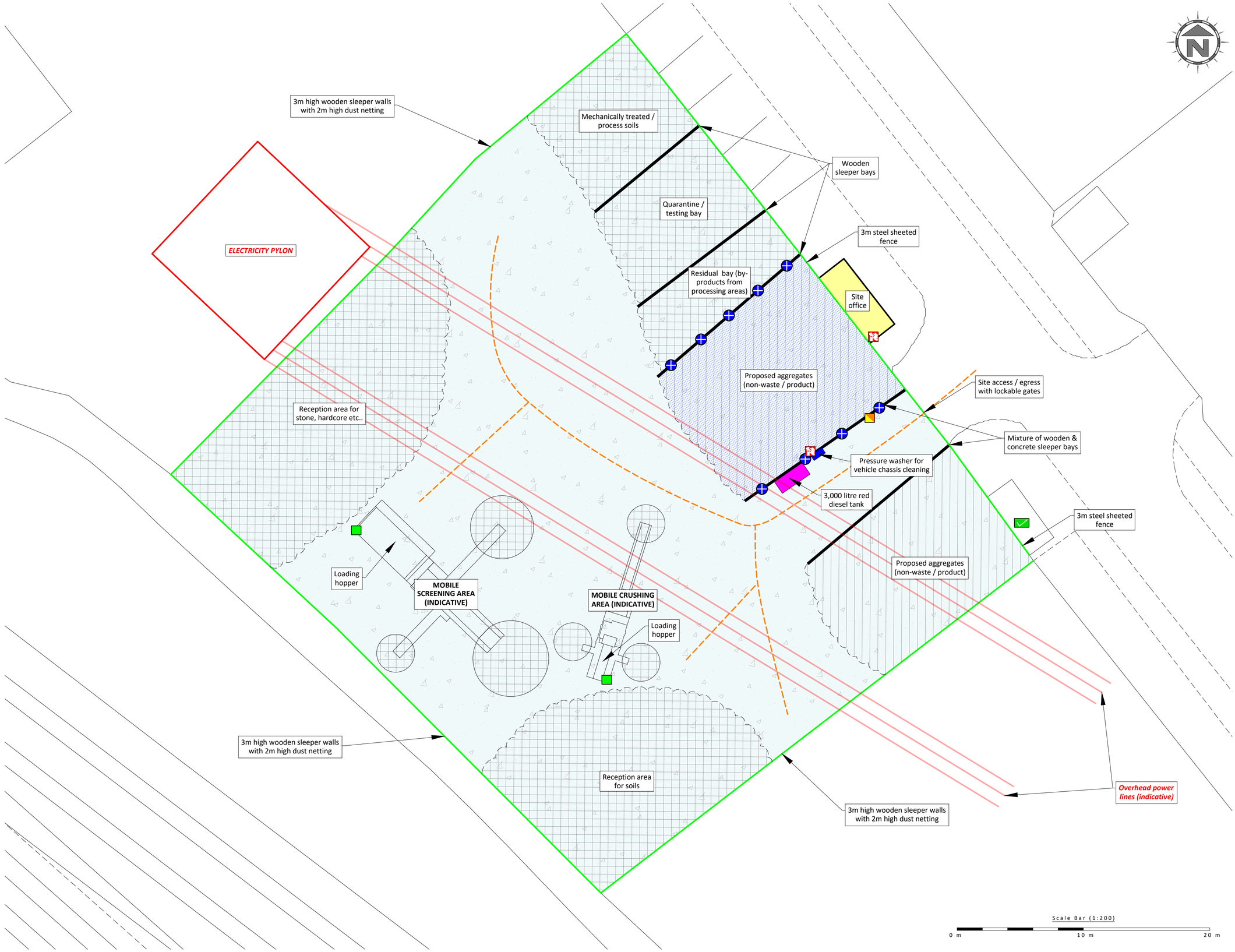
20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex RM15 4YD

SCALE @ A4	JOB NO	CLIENT NO
1:1,250	001	2670

DRAWING NUMBER	REV	STATUS
JUL/2670/02	-	Issued

DRAWN	CHECKED	DATE
CP	--	27.11.19

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk



NOTES

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd

REVISION HISTORY

Rev	Date	Init:	Description:
-	09.12.19	CP	Initial Drawing

Key:

- Permit boundary
- Waste storage areas
- Non-waste storage areas
- Concreted areas
- Other buildings (offices, etc.)
- Dust suppression (indicative)
- 0.2m wooden sleeper walls
- Spill kit
- Fire fighting equipment (extinguishers, etc.)
- Vehicle routing (indicative)
- Plant shut off
- Fire assembly point
- Dust suppression nozzles (indicative)

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

DRAWING TITLE
SITE LAYOUT PLAN

CLIENT
Seales Road Haulage Ltd

PROJECT/SITE
20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex RM15 4YD

SCALE @ A2	JOB NO	CLIENT NO
1:200	001	2670

DRAWING NUMBER	REV	STATUS
JUL/2670/03	A	Issued

DRAWN	CHECKED	DATE
CP	--	09.12.19

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk

Appendix II

Record Keeping Forms (Advisory as information only)

SEALES ROAD HAULAGE LIMITED
REJECTED WASTE - RECORD FORM SRH/RF/2

DATE	
TIME	
WASTE DESCRIPTION	
QUANTITY OF WASTE	
PRODUCER/HOLDER'S NAME, ADDRESS & TELEPHONE No.	
NAME OF CARRIER	
VEHICLE REGISTRATION	
CARRIER REG. No.	
REASON FOR REJECTION OF WASTE	
ACTION TAKEN	

SEALES ROAD HAULAGE LIMITED
SITE INSPECTION FORM - MINIMUM ONCE DAILY - TO BE REFERENCED THROUGHOUT THE DAY

	DAY →						
TYPE OF INSPECTION ↓	TIME OF INSPECTION (START)						
	TIME OF INSPECTION (FINISH)						
EMERGENCY ACCESS							
WEATHER TEMPERATURE							
SECURITY - GATES							
SECURITY - FENCING							
SITE ROADS / SURFACES (CLEAR FROM HAZARDS)							
WASTE STORAGE							
WASTE TYPES - COMPATIBILITY							
FIRE FIGHTING EQUIPMENT E.G. FIRE EXTINGUISHERS, HOSE REEL							
SITE SURFACES ACCEPTABLE							
NO SMOKING SIGNS IN PLACE							
REJECTED WASTE SKIP INTEGRITY							
WELFARE / OFFICE FACILITIES							
LITTER (I.E. LOOSE COMBUSTIBLE WASTE MATERIALS)							
REJECTED WASTE TYPES / STORAGE							
FIRES (ANY INCIDENTS REPORTED)							
PLANT/EQUIPMENT MAINTENANCE CHECKS							
DUST							
NOISE							
OTHER (SEE NOTES BELOW)							
INSPECTION CARRIED OUT BY							

NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):

CHECKED BY		**SIGNATURE**	
POSITION		**DATE**	
Sheet		***of***	

SEALES ROAD HAULAGE LIMITED
EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW - SRH/RF/6

EMPLOYEE NAME				**DATE COMPLETED**			
POSITION				**REVIEW DUE**			
TRAINER				**OUTCOME**	**PASSED**		
POSITION					**FURTHER TRAINING REQUIRED**		
CARRIED OUT /SIGN OFF >	**Y/N**	**SIGNED BY EMPLOYEE**	**SIGNED BY TRAINER**		**Y/N**	**SIGNED BY EMPLOYEE**	**SIGNED BY TRAINER**
ENVIRONMENTAL PERMIT				**FIRE PREVENTION PLAN**			
MANAGEMENT SYSTEM				**FIRE SAFETY**			
SITE RULES				**EMERGENCY PROCEDURES**			
RECORD KEEPING / TRANSFER NOTES				**STORAGE /PILE SIZE LIMITS**			
RECOGNITION OF WASTE TYPES				**STORAGE DURATION**			
SECURITY				**FIRE DETECTION**			
VEHICLE CHECKS				**FIRE ALARMS**			
PLANT OPERATION				**FIRE FIGHTING EQUIPMENT**			
PLANT CHECKS				**FIRE WATER CONTAINMENT MEASURES**			
AMENITY - LITTER, ODOUR, PESTS etc.				**SPILL CLEARANCE**			
NOTES AND ACTIONS:							

SEALES ROAD HAULAGE LIMITED
COMPLAINTS REPORT FORM (SRH/RF/7)

Date Recorded:	**Reference Number:**
Name and address of caller	
Telephone number of caller	
Time and Date of call	
Nature of complaint (noise, odour, dust, other) (date, time, duration)	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other complaints relating to this report	
Any other relevant information	
Potential reasons for complaint	
The operations being carried out on site at the time of the complaint	
Follow Up	
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Environmental Management System (EMS)	
Date changes implemented	
Form completed by	
Signed	
Date completed	

COMPLAINT RECORDING PROCEDURE:

Any complaints received will be recorded on form SRH/RF/7. This form will normally be completed, signed and dated by the Site Manager; if they are not available the Office Manager will complete the form.

1) The name, address and telephone number of the caller will be requested.

2) Each complaint will be given a reference number.

3) The caller will be asked to give details of:

    a) the nature of the complaint;
    b) the time;
    c) how long it lasted;
    d) how often it occurs;
    e) Is this the first time the problem has been noticed; and,
    f) what prompted them to complain.

4) The person completing the form will then, if possible, make a note of:

    a) the weather conditions at the time of the problem (rain, snow, fog etc.);
    b) strength and direction of the wind; and
    c) the activity or activities taken place on the site at the time the noise was detected, particularly anything unusual.

5) The reason for the complaint will be investigated and a note of the findings added to the report.

6) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.

7) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be invited to contact the Environment Agency and/or the Local Authority.

Note: Following any complaint the relevant management plan(s) will be reviewed to ensure appropriate actions are in place to counter any problems.

Appendix III

Copy of Environmental Permit

Standard rules

Chapter 4, The Environmental Permitting (England and Wales) Regulations 2016

Standard rules SR2010No12
Treatment of waste to produce soil, soil substitutes and aggregate

Introductory note

This introductory note does not form part of these standard rules.

When referred to in an environmental permit, these standard rules will allow the operator to store waste at a specified location and treat it to produce soil, soil substitutes and aggregate. Permitted wastes do not include hazardous wastes. The total quantity of waste that can be stored and subsequently treated at the site under these standard rules shall be no more than 75,000 tonnes per year. These standard rules do not permit the burning of any wastes, either in the open, inside buildings or in any form of incinerator.

The permitted activities shall not be carried out within 500 metres of a European Site[1], Ramsar site or a Site of Special Scientific Interest (SSSI) nor within a specified Air Quality Management Area (AQMA)[2]. The permitted activities shall not be within:

- 10 metres of any watercourse;
- 50 metres from any spring or well, or from any borehole not used to supply water for domestic or food production purposes; and
- 50 metres from any well, spring or from any borehole used for the supply of water for human consumption. This must include private water supplies.
- 250metres within the presence of Great Crested Newts, where it is linked to the breeding ponds of the newts by good habitat.;
- 50 metres of a site that has relevant species or habitats protected under the Biodiversity Action Plan that the Environment Agency considers at risk to this activity.;.
    - 50 metres of a National Nature Reserve (NNR), Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument.

These standard rules do not allow any point source emission into surface waters or groundwater. However, under the emissions of substances not controlled by emission limits rule:

- Liquids may be discharged into a foul sewer subject to a consent issued by the local water company.

[1] A candidate or Special Area of Conservation (cSAC or SAC) and proposed or Special Protection Area (pSPA or SPA) in England and Wales.

[2] An Air Quality Management Area within the meaning of the Environment Act 1995 which has been designated due to concerns about particulate matter in the form of PM10.

- Liquids may be taken off-site in a tanker for disposal or recovery.

- Clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste, may be discharged directly to surface waters, or to groundwater by seepage through the soil via a soakaway.

End of introductory note

Rules

1 – Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with rule 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in these standard rules shall have convenient access to a copy of them kept at or near the place where those duties are carried out.

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Avoidance, recovery and disposal of wastes produced by the activities

1.2.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 – Operations

2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the operations specified in table 2.1 below ("the activities").

Table 2.1 Activities	
Description of activities	**Limits of activities**
R13: Storage of wastes pending the operations numbered R3 and R5. **R3:** recycling or reclamation of organic substances which are not used as solvents. **R5:** Recycling or reclamation of other inorganic materials.	Treatment of wastes listed in table 2.3 consisting only of sorting, separation, screening, crushing and blending of waste for recovery as a soil, soil substitute or aggregate. Secure storage of wastes listed in table 2.3 pending treatment. Storage of wastes listed in table 2.4 shall not exceed 10,000 tonnes in total at any one time. All other wastes stored shall not exceed 40,000 tonnes in total at any one time. No more than 75,000 tonnes of waste shall be treated per year. Treatment of slags and ashes for disposal shall not exceed 50 tonnes per day, or if for a mix of recovery and disposal shall not exceed 75 tonnes per day.

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan attached to the permit.

2.2.2 The activities shall not be carried out within:

(a) 500 metres of a European Site or Site of Special Scientific Interest (SSSI);

(b) 10 metres of any watercourse;

(c) 50 metres of any spring or well, or any borehole not used to supply water for domestic or food production purposes;

(d) a specified AQMA.

(e) 50 metres from any well, spring or from any borehole used for the supply of water for human consumption. This must include private water supplies.

(f) 250metres within the presence of Great Crested Newts where it is linked to the breeding ponds of the newts by good habitat;

(g) 50 metres of a site that has species or habitats protected under the Biodiversity Action Plan that the Environment Agency considers at risk to this activity;.

(h) 50 metres of a National Nature Reserve (NNR), Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument**.**

2.3 Waste acceptance

2.3.1 Waste shall only be accepted if:

(a) it is of a type listed in table 2.3 of these standard rules;

(b) it conforms to the description in the documentation supplied by the producer and holder;

(c) its chemical, physical and biological characteristics make it suitable for its intended treatment;

(d) any excavated soil from potentially contaminated sites has been shown by prior chemical analysis and assessment to be suitable for the intended use without significant risk of pollution; and

(e) it is visually inspected on arrival and before it enters the treatment process to ensure that it complies with these standard rules.

2.3.2. Any waste that does not comply with 2.3.1 shall be rejected and shall be;

(a) removed from the site; or

(b) moved to a designated quarantine area pending removal.

2.3.3 Records demonstrating compliance with rule 2.3 (including analysis and assessment of any excavated soil from potentially contaminated sites) shall be maintained.

Table 2.3 Waste types

Exclusions

Wastes having any of the following characteristics shall not be accepted:

- **Consisting solely or mainly of dusts, powders or loose fibres**
- **Hazardous wastes**
- **Wastes in liquid form**

Waste Code	Description
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 02	**waste from preparation and processing of meat, fish and other foods of animal origin**
02 02 02	shellfish shells from which the soft tissue or flesh has been removed only
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
10	**WASTES FROM THERMAL PROCESSES**
10 01	**waste from power stations and other combustion plants**
10 01 01	bottom ash and slag only
10 01 02	pulverised fuel ash only
10 01 05	gypsum (solid) only
10 01 07	gypsum (sludge) only
10 01 15	bottom ash and slag only from co-incineration other than those mentioned in 10 01 14
10 11	**wastes from manufacture of glass and glass products**
10 11 12	clean glass other than those mentioned in 10 11 11
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**
10 12 08	waste ceramics, bricks, tiles and construction products(after thermal processing)
10 13	**wastes from manufacture of cement, lime and plaster products and articles and products made from them**

10 13 14	waste concrete only
15	**WASTE PACKAGING**
15 01	**packaging**
15 01 07	clean glass only
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 02	clean glass only
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	road base and road planings (other than those containing coal tar) only
17 05	**soil (including excavated soil from contaminated sites) stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
17 08	**gypsum based construction material**
17 08 02	gypsum only other than that mentioned in 17 08 01
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE**
19 05	**wastes from aerobic treatment of solid waste**
19 05 03	compost from source segregated biodegradable waste only
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 02	washed sewage grit (waste from desanding) free from sewage contamination only
19 08 99	stone filter media if free from sewage contamination only
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 02	sludges from water clarification
19 12	**wastes from the mechanical treatment of wastes**
19 12 05	clean glass only
19 12 09	minerals (for example sand, stones)
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions**
20 01 02	clean glass only
20 02	**garden and park wastes**
20 02 02	soil and stones

2.4 Operating techniques

2.4.1 The activities shall be operated using the techniques and in the manner described in Table 2.4 below.

Table 2.4 Operating techniques		
When located within groundwater Source Protection Zones 1 or 2 the specified wastes below shall be stored and treated on an impermeable surface with a sealed drainage system. When located outside groundwater Source Protection Zones 1 or 2 all permitted wastes shall be stored and treated on hard-standing or on an impermeable surface with sealed drainage system.		
Waste Code	**Description**	
03 01 01	waste bark and cork	
03 03 01	waste bark and wood	
10 01 01	bottom ash and slag only	
10 01 05	gypsum (solid) only	
10 01 07	gypsum (sludge) only	
10 01 15	bottom ash and slag only from co-incineration other than those mentioned in 10 01 14	
17 05 06	dredging spoil other than those mentioned in 17 05 05	
17 08 02	gypsum only other than that mentioned in 17 08 01	
19 05 03	compost from source segregated biodegradable waste only	
19 09 02	sludges from water clarification	
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances	only
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01	
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03	

3 – Emissions and monitoring

3.1 Emissions of substances not controlled by emission limits

3.1.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.1.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.1.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container

3.2 Odour

3.2.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable, to minimise, the odour.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.3 Noise and vibration

3.3.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable, to minimise, the noise and vibration.

3.3.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 – Information

4.1 Records

4.1.1 All records required to be made by these standard rules shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible or are capable of retrieval; and

(d) be retained, unless otherwise agreed by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by these standard rules, unless otherwise agreed in writing by the Environment Agency

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by these standard rules to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

4.3.1 The Environment Agency shall be notified without delay following the detection of:

(a) any malfunction, breakdown or failure of equipment or techniques, accident or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;

(b) the breach of a limit specified in these standard rules; or

(c) any significant adverse environmental effects.

4.3.2 Written confirmation of actual or potential pollution incidents and breaches of emission limits shall be submitted within 24 hours.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters except where such disclosure is prohibited by Stock Exchange rules:

a) Where the operator is a registered company:

- any change in the operator's trading name, registered name or registered office address; and
- any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

b) Where the operator is a corporate body other than a registered company:

- any change in the operator's name or address; and
- any steps taken with a view to the dissolution of the operator.

c) In any other case:

- the death of any of the named operators (where the operator consists of more than one named individual);
- any change in the operator's name(s) or address(es); and
- any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership.

4.4 Interpretation

4.4.1 In these standard rules the expressions listed below shall have the meaning given.

4.4.2 In these standard rules references to reports and notifications mean written reports and notifications, except when reference is being made to notification being made "without delay", in which case it may be provided by telephone.

"accident" means an accident that may result in pollution.

"AQMA" means an air quality management area within the meaning of the Environment Act 1995 which has been designated due to concerns about particulate matter in the form of PM10.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in Section 108(4) of that Act.

"dangerous substances" means any substance that has been or will be classified as dangerous in Directive 67/548/EEC and its subsequent amendments.

"*domestic purposes*" has the same meaning as in section 218 of the Water Industry Act 1991.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from emission points specified in these standard rules or from other localised or diffuse sources, which are not controlled by an emission limit.

"European Site" means a European site within the meaning of Regulation 8 of the Conservation of Habitats and Species Regulations 2017.

"food production purposes" means the manufacturing, processing, preserving or marketing purposes with respect to food or drink for which water supplied to food production premises may be used, and for the purposes of this definition "food production purposes" means premises used for the purposes of a business of preparing food or drink for consumption otherwise than on the premises.

"*good habitat"* means rough (especially tussocky) grassland, scrub and woodland

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"hazardous waste" has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended)

"impermeable surface" means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface, and should be read in conjunction with the term "sealed drainage system" (below).

"hardstanding" is a compacted solid surface capable of withstanding the operation and the loading / unloading of wastes.

"IBA" means incinerator bottom ash derived from the incineration or pyrolosis of waste.

"pollution" means emissions as a result of human activity which may—

(a) be harmful to human health or the quality of the environment,
(b) cause offence to a human sense,
(c) result in damage to material property, or
(d) impair or interfere with amenities and other legitimate uses of the environment.

"*quarter*" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"R" means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste.

"sealed drainage system" in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

(a) no liquid will run off the surface otherwise than via the system;
(b) except where they may lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.

"secure storage" means storage where waste cannot escape and members of the public do not have access to it.

"SSSI" means Site of Special Scientific Interest within the meaning of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000).

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk. 'List of Wastes' means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"year" means calendar year commencing on 1st January.

End of standard rules

Appendix IV

Health & Safety – Conditions of Site Use

HEALTH AND SAFETY - CONDITIONS OF SITE USE

The following guidelines apply to all site personnel, contractors and visitors using the site (where applicable).

1) The site is covered by the Health and Safety at Work Act 1974 and its associated regulations and all users must abide by any relevant provisions. Any person found to be in contravention of the requirements of this Health and Safety Statement will be asked to leave the site.

2) All visitors must sign the visitor's book upon entry to and exit from the site. All vehicle drivers must report to the office and await instruction from the site manager/deputy before proceeding to deposit waste at the site.

3) All accidents, diseases, injuries or dangerous occurrences shall be reported to the site manager. All instructions issued by the site manager in respect of health and safety at the site must be followed by all site users.

4) A first aid box (including eye-wash bottles) will be kept in the site office. If you are injured on site please alert a member of staff/trained first-aider for assistance.

5) All persons must wear the appropriate PPE on site including high visibility jackets and hard hat.

6) Safety boots must be worn by all persons in the waste processing/storage areas.

7) Protective gloves must be worn for any operations which present a hazard of puncture to or laceration of the skin or for any manual handling work carried out on site.

8) Ear defenders, safety helmets (hard hats) and eye protection will be issued when deemed necessary and must be worn by all employees and contractors where required by the site manager or other site representatives.

9) Fire extinguishers are kept on site to deal with any fires - fires shall only be dealt with by employees of Seales Road Haulage Limited unless alternative instructions are given by the site manager. Access to fire exits and firefighting equipment must be kept clear at all times. If a fire alarm sounds please follow instructions and leave the site in an orderly fashion.

10) Persons who are suspected to be under the influence of drugs or alcohol will be removed from the site.

11) Smoking is not permitted on the site.

12) Observe and follow all traffic directions and traffic/safety signs.

13) Drivers must comply with all safety instructions given by the site manager or appointed deputy.

14) All drivers are responsible for ensuring that their vehicle is safely loaded. Unsafe loads will not be accepted at the site and will not be allowed to leave the site until they have been made safe.

15) Drivers waiting to tip at the site will follow the instructions of the operator and only tip in the designated area, unless advised otherwise. No tipping will take place over sorted stockpiles.

16) Drivers must remain in the cab or stand well clear of the vehicle during loading or tipping. Once the vehicle has been loaded it must be securely sheeted (if necessary) before leaving the site. When sheeting and unsheeting the vehicle ensure that the engine is switched off, the ignition key removed and the parking brake is on. Do not gain access using the mudguards and wheels. Ensure that ropes, hooks and sheets are in good condition.

17) Never travel with the vehicle body raised and ensure the maximum height of the raised body the vehicle is known.

Declaration: To be completed by site users

I have read and understand the conditions of use for this site and agree to comply with them at all times. I accept that neither Seales Road Haulage Limited nor their employees shall be liable for any loss or injury arising from my non-compliance with the above conditions.

Signed..... Print name.....

Company/Organisation..... Date.....

Note: these conditions are included in the EMS for information only and may be revised regularly as part of the site health and safety policy.

Appendix V

Aggregates Quality Protocol

SECONDARY AGGREGATES PROTOCOL

20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD

Seales Road Haulage Limited

Version:	1.0	**Date:**	14 September 2020		
Doc. Ref:	JUL-2670_WRAP_QP	**Author(s):**	IA	**Checked:**	SRH
Client No:	2670	**Job No:**	003		

KALEX
environmental consultants

Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants

Oaktree Environmental Ltd, Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ
Tel: 01606 558833 | Fax: 01606 861183 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk
REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

Version	Issue date	Author	Checked	Description
1.0	14/09/2020	IA	SRH	Document Issue

CONTENTS

DOCUMENT HISTORY: I
CONTENTS II
LIST OF APPENDICES: III
1 INTRODUCTION 1
1.1 BACKGROUND 1
1.2 DEFINITION OF WASTE/END OF WASTE 2
2 ACCEPTANCE CRITERIA AND THE PROCESS 5
3 APPLICATION PROCESSES 6

List of Appendices:

Appendix A - Process Flowchart

Appendix B - Materials Testing

Appendix C - Wrap Quality Protocol

1 Introduction

1.1 Background

1.1.1 Recent domestic and ECJ (European Court of Justice) rulings have resulted in the establishment within the UK of a decision that the products obtained from processing many recyclable waste streams are still waste until they are finally used. This decision creates uncertainty for the users of such products and pushes their decision making towards virgin materials away from the waste hierarchy, in particular the re-use of construction waste is one of the most affected activities at present.

1.1.2 The purpose of this document is to confirm that Seales Road Haulage Limited supports "the quality protocol" produced by WRAP (Waste and Resources Action Programme) and to document which waste streams are best utilised for the production of secondary or recovered aggregates including specified cohesive materials the quality controls involved in the creation of such materials.

1.1.3 Once materials have met the requirements of this protocol, they are no longer considered to be waste. The need for this document may also be negated by the outcome of pending legal cases which have a bearing on the definition of waste. The current Quality Protocol "Aggregates from inert waste" was issued in October 2013 and is attached to this document for reference as Appendix C and all references in this document to the "Quality Protocol" shall mean this document or any newer version.

1.1.4 For customers using our recycled products there will be little or no observable difference from virgin materials in their normal construction use. However, there are significant advantages in confirming beyond reasonable doubt that recovered aggregates are not waste, namely:

- The term 'waste' has a blight effect even where customers are fully aware of the source and are satisfied as to the composition and analysis.

- Use of waste in construction requires the registration of a U1 exemption which can delay works on site.
- Using virgin materials is contrary to all current recycling policies and results in the production of more greenhouse gases using suitable material defined under an aggregates protocol is better for the environment.

1.2 Definition of waste/end of waste

1.2.1 The Waste Framework Directive definition of waste is well documented and is subject to separate Defra guidance, which may influence the legal definition of waste interpretation in England and Wales. The status of the construction and demolition wastes treated by mobile plant or within our site(s) is not in dispute but the point at which they cease to be waste when processed requires confirmation. The EA and NRW consider that once a substance or object has become waste, it will remain waste until it has been fully recovered and it no longer poses a potential threat to the environment or human health. However, the crucial test of self-interest is not considered in recent case law and until such confirmation is received this document shall be used to demonstrate compliance with the current Quality Protocol.

1.2.2 One of the main considerations in determining a substance as waste has been that the producer of the waste does not have the self interest to deal with the waste satisfactorily. In the case of recovered aggregates, the self interest is met by virtue of the fact that the customer will reject materials which are substandard and reduce the likelihood of using the same supplier. The products have to be fit for purpose and meet the customers' requirements, many of whom are engaged in civil engineering works and are qualified to make the decision as to whether or not the material is fit for purpose and to specify any pre-acceptance testing or analysis for the end use. This is reinforced by Paragraph 1.2.1 of the Quality Protocol.

1.2.3 If a recovered aggregate meets a specification which is fit for an intended use and does not pose a threat to the environment i.e. it has a beneficial use then it should be considered to be a product if the following procedures are followed.

1.2.4 Recycled aggregates resulting from the processing of inorganic material previously used in construction can be processed to a plethora of specifications which easily demonstrate their equivalence to natural materials. The main sized products (for use in various specifications) currently prepared by Seales Road Haulage Limited arising from their permitted operations may include:

a) 5 mm down
b) 6 mm
c) 10 mm
d) 14 mm
e) 20 mm
f) 5 - 20 mm
g) 10 - 20 mm
h) MOT Type 1 sub-base, pipe bedding and other products produced from (a) to (g).
i) Foam Binder Coarse, recycled coal lay binder/base course to CL948,
j) Other bespoke products prepared to customer's requirements and specifications not subject to full testing the specifications in x) below but of similar nature where documented specification not required e.g. "crusher run" or cohesive engineered fill for car parks roadways noise bunds etc.
k) Grades of material as specified in the MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS VOLUME 1 SPECIFICATION FOR HIGHWAY WORKS such as 1A well graded granular material 7A cohesive fill, 6F2 selected granular material coarse grading etc.

1.2.5 The list is not limited as the actual grades produced will depend upon the specification required by the customer, in line with the requirements of the Quality Protocol.

1.2.6 The production of a saleable product does not, in itself, ensure recovery and remove the designation as waste, according to the protocol document. However, it is stated that there must also be a need and a market for the recovered waste and that it will not be merely stockpiled pending development of such a need or market. The

market for recovered aggregates of the specifications stated above is well established and the materials meet a recognised need. This is also supported by the literature produced by Seales Road Haulage Limited to advise customers of the products and specifications available.

2 Acceptance criteria and the process

2.1.1 Seales Road Haulage Limited are based at 20 Juliette Way, Purfleet Industrial Park, South Ockendon, Essex, RM15 4YD. The company accepts inert and excavation waste from construction and demolition sites as well remediation, greenfield and brownfield sites. The site is to operate within the stipulations of an A16: Physical Treatment Facility Environmental Permit (EP).

2.1.2 The feedstock for aggregate production consists of the materials generated from these demolition/excavation works in the form of bricks, tiles, ceramics, concrete, soil, stone, etc., which are generated at the site of production. The individual materials produced are then stored in separate stockpiles as required prior to crushing/screening/processing to ensure the feedstock for the desired product is uniform. Materials that are deemed unsuitable for recovery as secondary aggregates under this protocol or contain in excess of a 1% admix will be directed to other suitably authorised sites for treatment use or disposal.

2.1.3 A summary of the production process is shown on the flowcharts in Appendix A. The Method Statement of Production (MSP) consists of Sections 2 and 3 of this document and Appendix A flowcharts. Product forms are shown in Appendix II and are provided to the customer upon purchase/delivery of product.

3 Application processes

3.1 Research of other recycled aggregate producers has revealed a wide variability in testing regimes and product specification. However, many such materials cannot demonstrate compliance with the WRAP Producers' Compliance Checklist or the Purchasers'/Specifiers' Compliance Checklists.

3.2 The inspection and testing regime including frequency and methods of test for finished product shall be detailed and appropriate to the material end use, the quality of input material and the complexity of the waste recovery process. As a minimum the stockpiles will be sampled and tested in accordance with the sampling regime specified in Appendix B or in accordance with customers' requirements. The testing rates may be varied to ensure a controlled process.

3.3 Results of tests are required to meet the customer's specification and will be forwarded upon request. If further tests are required for assessment of suitability for a customer's specific end use, then the results shall also be retained.

3.4 Our delivery documentation states that: "This recycled aggregate has been produced in compliance with the WRAP Quality Protocol".

3.5 Delivery documentation will also state the following

- Date and time of supply.
- Customer's name and contact details.
- Product description (to aggregate standard and customer's specification).
- Seales Road Haulage Limited contact details and address of site of production.
- Quantity supplied (weight or volume).
- Whether aggregate is suitable for use in bound or unbound applications.

3.6 Records made in accordance with this document will be retained for two years after supply to the customer.

3.7 We undertake to provide the following when requested by the customer;

- Test results.
- Test procedures.
- Outline details of the production method.
- Provide samples for independent testing.
- Information relating to storage, transport and handling of the aggregate (with reference to Appendix D of the WRAP Quality Protocol).

3.8 Depending on the process(es) which give rise to the materials at the site of production, the waste used for processing (acceptance criteria) will fall within the following waste codes (in accordance with the conditions in Page 18 of the Quality Protocol):

- 01 04 08 Waste gravel and crushed rocks other than in 01 04 07
- 01 04 09 Waste sands and clays
- 10 11 03 Waste glass-based fibrous materials
- 17 01 01 Concrete
- 17 01 02 Bricks
- 17 01 03 Tiles and ceramics
- 17 01 07 Mixtures of concrete, bricks, tiles and ceramics
- 17 02 02 Glass (also 19 12 05 and 20 01 02)
- 17 03 02 Bituminous mixtures other than mentioned in 17 03 01
- 17 05 04 Soils and stones, including gravel
- 17 05 06 Dredging spoil other than mentioned in 17 05 07
- 17 05 08 Track ballast
- 17 09 04 Mixed construction and demolition waste other than 170901/2/3.
- 19 12 09 Minerals (sand, stones etc.)
- 20 02 02 Soils and stones

3.9 Incidental quantities of soils, peat, wood, plastics, rubber and metal may be present in the incoming waste but will be removed during the production process to the permitted levels set out in the Quality Protocol (i.e. less than 1% by mass where permitted).

3.9.1 Samples for analysis will be aggregated samples from each stockpile. 4 - 8 sub-samples will be taken to make one 2 kg sample, which will provide sufficient additional material for further analysis at the customer's request. Sampling will be undertaken by trained staff and analysis is carried out by accredited methods and laboratories, using the methods set out in the Quality Protocol and Appendix B of this document.

3.9.2 The nominated site manager will be responsible for the implementation of this document and supervising the process at any of the sites operated by Seales Road Haulage Limited and will also be responsible for the adherence to approved industry standards and factory production protocol to comply with Appendix B of the Quality Protocol.

3.10 Where there is any conflict with this document and the Quality Protocol the procedures in the latter shall take precedence.

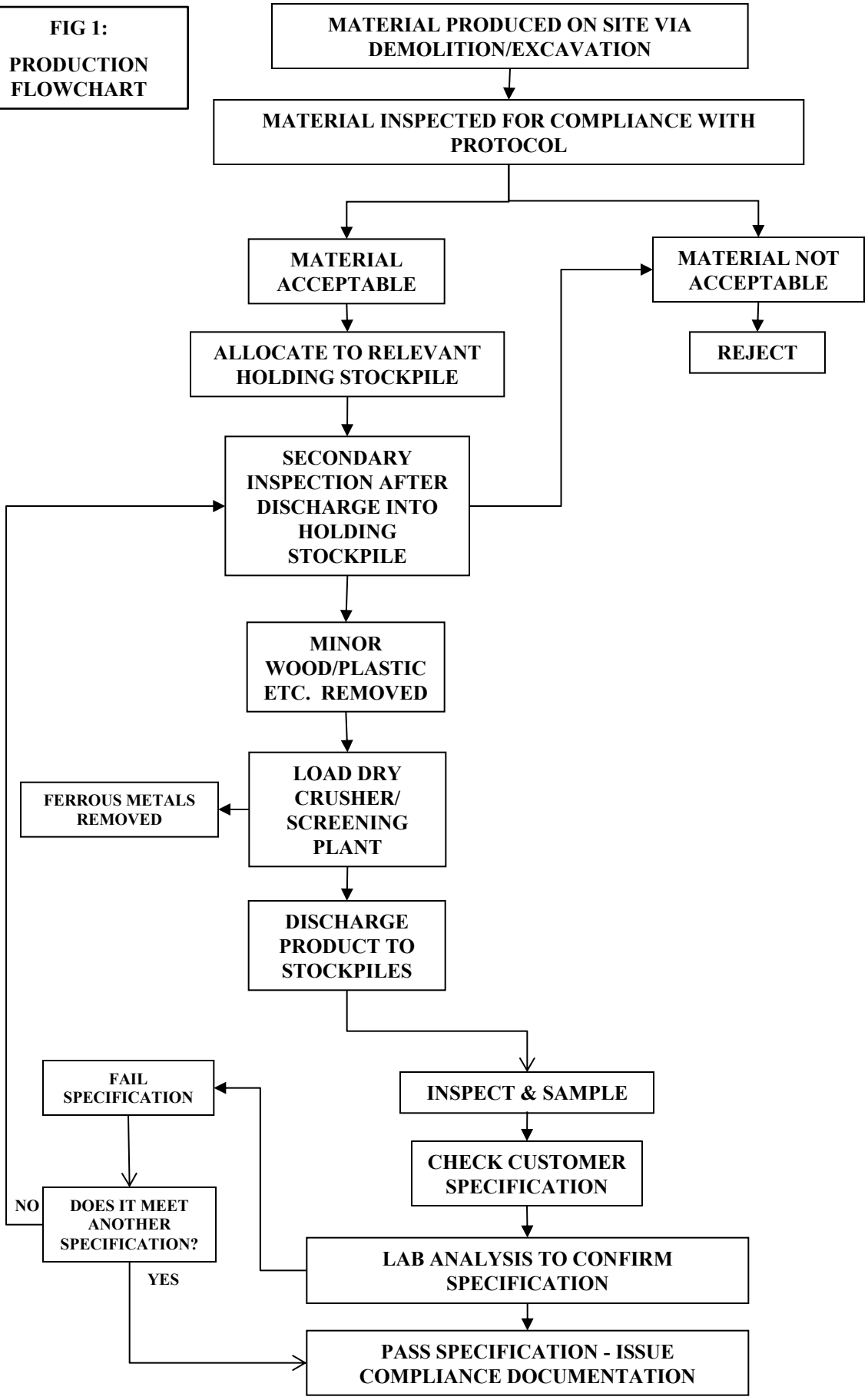
Peter Seales
Director
Seales Road Haulage Limited
14 September 2020

Appendix A

Process Flowchart

FIG 1:

PRODUCTION FLOWCHART



Appendix B

Materials Testing

Minimum test frequencies for Seales Road Haulage Limited aggregates

	Product	Property	Test Method BS EN	Minimum Test Frequency
1	All products and end uses	Particle size distribution (PSD)	933-1	Weekly
		Particle density	1097-6	Monthly
		Water Soluble Sulphate	1744-1	Monthly
		Classification of constituents	933-11	Monthly
		Resistance to fragmentation (LA)	1097-2	6 Monthly

Notes:

Test frequencies are based on the operational hours and output of the production plant, which can both increase or decrease, resulting in a change in the testing frequency but no change in compliance with the aggregate protocol.

Other test methods stated in the protocol document (Appendix B) may also be used according to the end use.

The minimum test periods above relate to production weeks or months i.e. one production week means one week of continuous production.

Tests will be carried out in accordance with the required standards set out in Appendix B of the Quality Protocol.

The presence of cohesive constituents such as clay, soil, metal, wood, plastic, rubber, gypsum plaster is permitted to a level of up to 1% by mass in BS EN 933-11 group testing.

Appendix C

Wrap Quality Protocol

wrap

Environment Agency

Quality Protocol

Aggregates from inert waste

End of waste criteria for the production of aggregates from inert waste

NIEA Northern Ireland Environment Agency
www.doeni.gov.uk/niea

Cyfoeth Naturiol Cymru Natural Resources Wales

This Quality Protocol was funded by Defra, the Welsh Government and the Northern Ireland Environment Agency (NIEA) as a business resource efficiency activity. It was developed by the Environment Agency and WRAP (Waste & Resources Action Programme) in consultation with Defra, the Welsh Government, industry and other regulatory stakeholders. The Quality Protocol is applicable in England, Wales and Northern Ireland. It sets out the end of waste criteria for the production and use of aggregates from inert waste.

Contents

1. **Introduction** 02
2. **Producing aggregates from inert waste** 06
3. **Providing evidence of compliance with the Quality Protocol** 07
4. **Application and use of recycled aggregates** 08

Appendix A 09
Definitions

Appendix B 11
Approved industry standards and Factory Production Control

Appendix C 17
Wastes considered to be inert waste for the purposes of this document and to be acceptable for the production of recycled aggregates

Appendix D 20
Good practice applicable to the transport, storage and handling of recycled aggregates

Foreword

Background

Uncertainty over the point at which waste has been fully recovered and ceases to be waste within the meaning of Article 3(1) of the EU Waste Framework Directive (2008/98/EC) has inhibited the development and marketing of materials produced from waste which could otherwise be used beneficially without damaging human health and the environment. In some cases, this uncertainty has also inhibited the recovery and recycling of waste and its diversion from landfill.

Interpretation of EU legislation is ultimately a matter for the Courts and there is now a substantial body of case law on the interpretation of the definition of waste. Drawing on the principles established in this case law, it is possible to identify the point at which certain wastes can be regarded as having ceased to be waste and thus when the Directive's waste management controls should no longer apply. This identification is the purpose of the Waste Protocols Project.

What is a Quality Protocol?

A Quality Protocol sets out end of waste criteria for the production and use of a product from a specific waste type. Compliance with these criteria is considered sufficient to ensure that the fully recovered product may be used without undermining the effectiveness of the Waste Framework Directive and therefore without the need for waste management controls.

A Quality Protocol indicates how compliance should be demonstrated and points to good practice for the storage, transportation and handling of the fully recovered product. The Quality Protocol further aims to provide increased market confidence in the quality of products made from waste and so encourage greater recovery and recycling.

1. Introduction

Definitions of terms that appear in italics when they are first used in this Quality Protocol are given in Appendix A.

1.1. What is this Quality Protocol?

1.1.1 This Quality Protocol has been developed by the *Environment Agency*, the *Northern Ireland Environment Agency (NIEA)* and *WRAP (Waste & Resources Action Programme)* in consultation with industry and other regulatory stakeholders. It is applicable in England, Wales and Northern Ireland.

1.1.2 The Quality Protocol sets out end of waste criteria for the production and use of *aggregates* from *inert* waste. It supersedes 'Quality Protocol for the production of aggregates from inert waste', revised edition (ISBN 1-84405-217-6). If the criteria set out are met, the resulting outputs will normally be regarded as having been fully recovered and to have ceased to be waste.

1.1.3 Producers and users are not obliged to comply with the Quality Protocol. If they do not, the aggregate will normally be considered to be waste[1] and *waste management controls* will apply to its handling, transport and use.

1.1.4 This Quality Protocol does not affect the obligation of producers to hold an *environmental permit* (including an exemption) and to comply with its conditions when storing and processing waste.

1.1.5 This Quality Protocol does not affect permitting or any other legal requirements that do not depend on the status of the material as a waste.

1.2 The purpose of the Quality Protocol

1.2.1 The Quality Protocol has four main purposes:

i. clarifying the point at which waste management controls are no longer required;
ii. providing users with confidence that the aggregate they purchase conforms to an approved industry specification defined in accordance with an appropriate European aggregate standard;
iii. providing users with confidence that the aggregate is suitable for a use within a *designated market sector(s)* including by conforming with the industry standard; and
iv. protecting human health and the environment (including soil).

1.2.2 In addition, the Quality Protocol describes acceptable good practice for the transportation, storage and handling of aggregate (see Appendix D).

1.3 Complying with the Quality Protocol

1.3.1 Aggregate will normally be regarded as having ceased to be waste, and therefore no longer subject to waste management controls, provided:

- it conforms to the requirements of the European standard appropriate to the use it is destined for as set out in Section 2;
- the aggregate is produced under *Factory Production Control* as required by the European standard and as set out in Section 2;
- within Factory Production Control, inputs are limited and controlled as set out in Section 2;
- it requires no further processing, including size reduction, for the use it is destined for as set out in Section 2;

[1] Unless on a case-by-case basis it can be demonstrated that the material is non-waste.

- it is destined for a use within the designated market sectors set out in Section 4; and
- it conforms with CE conformity marking requirements contained in the Construction Products Regulations, which will apply to all aggregates placed on the market to harmonised European Aggregates Standards from July 2013.

1.3.2 Producers must demonstrate that these criteria have been met. They should do this in the ways set out in Section 3.

1.3.3 This Quality Protocol will be adopted as a technical regulation under *Technical Standards and Regulations Directive (98/34/EC)* as amended. We recognise that there may be codes of practice which apply in the *European Economic Area (EEA)* States other than the UK setting out requirements for the use of aggregate. We accept that aggregate may cease to be waste provided it has been produced in compliance with:

- a relevant code of practice of a national standards body or equivalent body of any EEA State; or
- any relevant international standard recognised for use in any EEA State; or
- any relevant technical regulation with mandatory or de facto mandatory application for marketing or use in any EEA State.

These must give levels of product performance and protection of human health and the environment which are equivalent to those required by this Quality Protocol.

1.3.4 An outline of the main stages and control mechanisms of the Quality Protocol is presented in Figure 1. These are described further in Sections 2 and 3.

1.4 When Quality Protocol compliant material may become waste

1.4.1 Producers and users of aggregate should note that, even if the Quality Protocol is complied with, the material will become waste again and subject to waste management controls at any stage it is discarded or there is an intention or requirement to discard, for example if it is:

- disposed of; or
- stored indefinitely with little prospect of being used.

1.4.2 In addition, if Quality Protocol compliant material is mixed with waste materials, the resulting mix will be considered to be a waste and subject to waste management controls. If Quality Protocol compliant material is mixed with non-waste materials, the resulting mix will not, as a result, be waste.

1.5 Failure to comply with the Quality Protocol

1.5.1 Where this Quality Protocol is not complied with, for example the aggregate does not conform to the requirements of the European standard or the producer cannot demonstrate evidence of compliance, the aggregate produced will normally be considered to be waste. In such circumstances, the producer or user must comply with the appropriate waste management controls[2] for the transportation, storage and use of the aggregate and may be committing an offence if they do not do so.

1.5.2 Detailed guidance on waste management controls can be obtained from the Environment Agency's National Customer Contact Centre on 08708 506 506, from its website (www.environment-agency.gov.uk/subjects/waste/), from Natural Resources Wales website (enquiries@naturalresourceswales.gov.uk) or from NIEA's website (www.ni-environment.gov.uk/waste-home/authorisation.htm).

[2] For example, in compliance with Article 23 of the Waste Framework Directive, the user might need to obtain a permit from the Environment Agency or Natural Resources Wales (or in Northern Ireland a waste management licence or PPC permit from the NIEA).

1.6 Updating the Quality Protocol

1.6.1 We will review and update this document as we consider appropriate.

1.6.2 Triggers for a review could include:

- pollution incidents;
- development in scientific understanding;
- a change in the market;
- a change in legislation or case law; or
- a change to the agreed European standard.

1.6.3 This Quality Protocol may be withdrawn if it becomes apparent that it is generally being misapplied and/or misused.

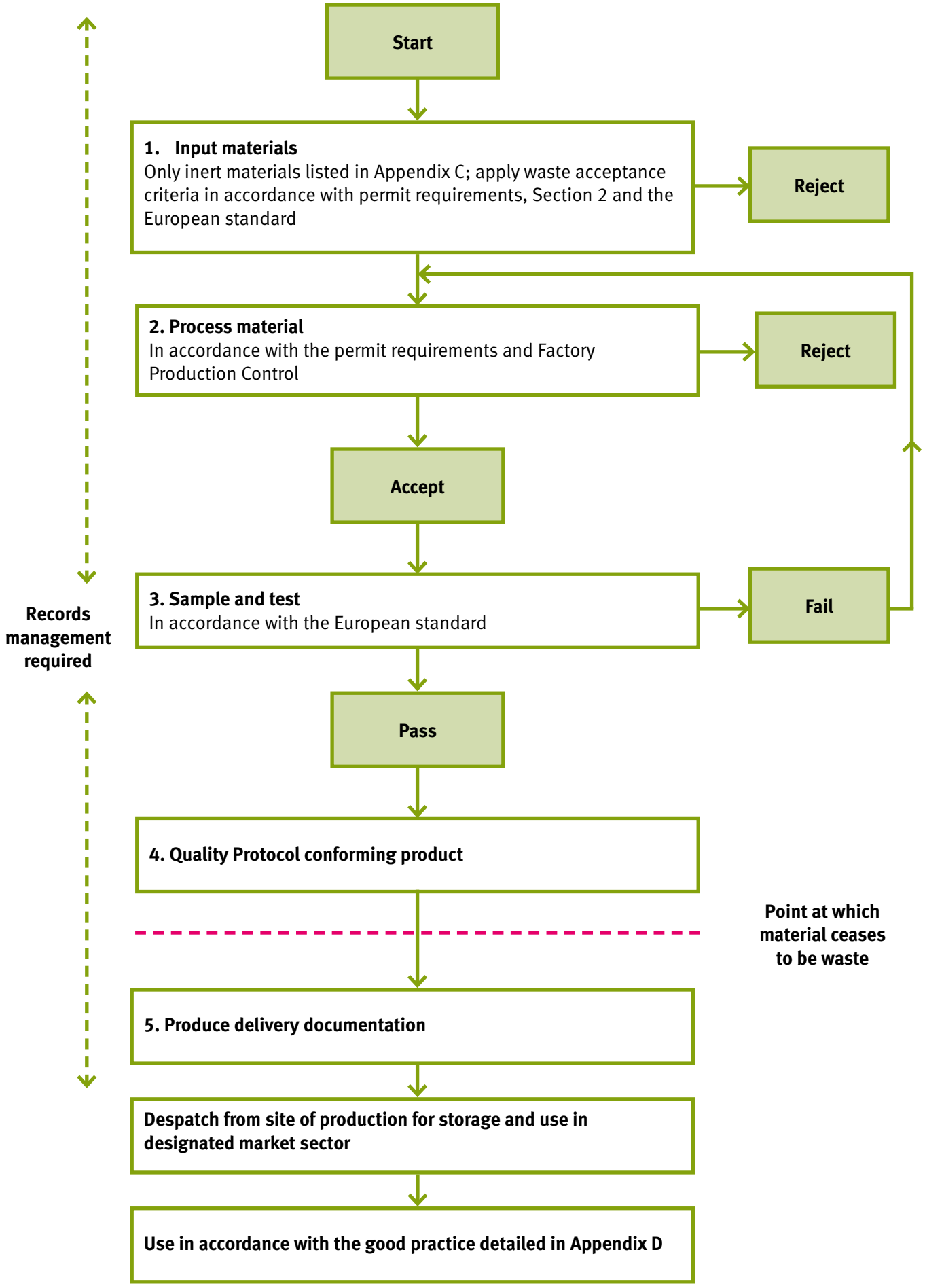
1.7 Importing and exporting Quality Protocol compliant material

1.7.1 Producers intending to export material that has been produced in compliance with this Quality Protocol should be aware that, although the material may cease to be waste in England, Wales and Northern Ireland, the country of destination may take a different view. If the competent authority in the country of destination considers the material to be waste, the shipment will be subject to the controls set out in the Waste Shipment Regulation (EC No. 1013/2006).

1.7.2 Those intending to import Quality Protocol compliant material into England, Wales or Northern Ireland should be aware that, if the country of despatch regards the material as waste, the controls set out in the Waste Shipment Regulation will apply to the shipment. This is the case even though the material may be regarded as having ceased to be waste in England, Wales and Northern Ireland.

1.7.3 Before importing or exporting such material it is prudent to check with the competent authority for the country of despatch or destination. A list of the competent authorities can be found at: http://ec.europa.eu/environment/waste/shipments/pdf/list_competent_authorities.pdf

Figure 1: Main stages and control mechanisms of the Quality Protocol



2. Producing aggregates from inert waste

2.1 Regulating the production process

2.1.1 The process of turning inert waste material into a product is classified as a waste recovery operation and is subject to the waste management controls set out in the Waste Framework Directive and domestic legislation. This Quality Protocol does not affect the obligation on producers to hold an environmental permit (including exemptions) (in Northern Ireland a waste management licence or exemption or a PPC permit is required) that authorises the storage and processing of inert waste and to comply with its conditions.

2.2 Criteria for producing aggregate that has ceased to be waste

2.2.1 To comply with this Quality Protocol, aggregate must be produced in compliance with the criteria outlined in Sections 2.3 to 2.5. In addition, the material should be destined for use in the designated market sector described in Section 4.

2.3 Input materials

2.3.1 The only acceptable input materials are the inert waste materials specified in Appendix C.

2.3.2 To ensure that only inert waste is accepted, producers must have acceptance criteria which meet, as a minimum, the requirements set out in Appendix C.

2.4 Processed in accordance with the approved standard including a Factory Production Control system

2.4.1 The producer must comply with all the requirements of a BS EN aggregates standard (for example, BS EN 13242), appropriate for the use for which the aggregate is destined, at the time it is produced, to comply with this Quality Protocol. Appendix B details the main standards and specifications relating to aggregates at the time of publishing this Quality Protocol.

2.4.2 The specifications (for example, the Highways Agency's Specification for Highway Works (SHW)) summarised in Appendix B have properties selected from the BS EN aggregates standards. The requirements for evaluation of conformity from the relevant BS EN apply in all cases.

2.4.3 The standards and specifications summarised in Appendix B are subject to review and producers should ensure they work to the latest version. Any changes to the agreed standards and specifications may trigger a review of the Quality Protocol (see Section 1.6.2).

2.4.4 Producers must set up and produce the aggregate under a system for Factory Production Control as set out in the relevant BS EN aggregates standard listed in Appendix B.

2.5 Requires no further processing

2.5.1 The aggregate must require no further processing, including size reduction, for the use for which it is destined at the time it is produced to comply with this Quality Protocol.

3 Providing evidence of compliance with the Quality Protocol

3.1 Producers must be able to demonstrate compliance with all the requirements of this Quality Protocol.

3.2 Some of the records specified below may already be required as part of the producer's environmental permit conditions (waste management licence or PPC permit conditions if in Northern Ireland). This Quality Protocol does not affect the obligations on producers to comply with environmental permit conditions (waste management licence or PPC permit conditions if in Northern Ireland).

3.3 Records management

3.3.1 To be able to demonstrate compliance with the Quality Protocol, producers must maintain *delivery documentation* for every load of *recycled aggregate* despatched.

3.3.2 This delivery documentation must include:

- date of supply;
- customer's name and contact details;
- product description to aggregates standard and customer specification;
- the name and contact details of the producer, including the address of the site of production;
- quantity supplied by weight/volume; and
- a statement that the product was produced in compliance with this Quality Protocol.

Where requested by the purchaser further documentation should also include:

- test results and procedures in accordance with the standard or specification in Appendix B and for any further tests required to assess suitability for a particular end use;
- outline details of the Factory Production Control manual; and
- information on good practice relating to the storage, transportation and handling of aggregate (as set out in Appendix D).

3.3.3 These requirements are additional to any statutory record-keeping obligations. However, some records may be used to fulfil both a regulatory obligation and evidence of compliance with this Quality Protocol.

3.3.4 For the purposes of this Quality Protocol the producer, must:

- keep and retain specified records for a minimum of two years; and
- make them available for inspection by the regulator (if requested).

4. Storage and use of recycled aggregates

4.1 As for all aggregate, users of recycled aggregate that complies with this Quality Protocol should take full account of any environmental impact resulting from its use.

4.2 Storage of recycled aggregate

4.2.1 Aggregate produced in compliance with the requirements of this Quality Protocol, which is therefore regarded as having ceased to be waste, may need to be stored temporarily either before delivery to the customer or at the customer's premises. The materials will not be waste at that point, so waste management controls will not apply.

4.2.2 If it appears that the material is being stored indefinitely with no certainty of use, the material will revert to being a waste and waste management controls will apply as specified in Section 1.4.

4.2.3 Producers, distributors and users should follow good practice for the transportation, storage and handling of aggregate, details of which are included in Appendix D.

4.3 Use of recycled aggregate – designated market sectors

4.3.1 To comply with this Quality Protocol, aggregate must be destined for use in unbound or bound applications in civil engineering and construction (as set out below) and appropriate product descriptions must be used on delivery documentation.

- Unbound – including sub-base, capping, general fill, pipe bedding and drainage;
- Bound – including hydraulically bound applications, concrete and asphalt.

Appendix A Definitions

In this Quality Protocol, the words and phrases below have the following meanings.

Agent: An agent acts like a broker, putting buyer and seller together. The agent does not take possession of the aggregate but is paid commission while the buyer is invoiced directly.

Aggregate: A granular material used in construction. For the avoidance of doubt, clays and soils are not considered to be aggregates for the purposes of this Quality Protocol.

Defra: Defra is the UK government department responsible for policy and regulations on the environment, food and rural affairs.

Delivery documentation: Record of who the aggregate is supplied to, including the documentation accompanying each load of aggregate. It details the standard to which the product complies and states that the product was produced in compliance with this Quality Protocol.

Designated market sector(s): The sector(s) listed in Section 4 to which this Quality Protocol applies.

Environment Agency: The Environment Agency is the leading public body for protecting and improving the environment in England. Its job is to make sure that air, land and water are looked after by everyone in today's society, so that tomorrow's generations inherit a cleaner, healthier world.

Environmental permit: Environmental permits issued or exemptions registered under the Environmental Permitting (England and Wales) Regulations 2010.

European Economic Area (EEA): The EEA States consist of the members of the EU (Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK) together with Iceland, Liechtenstein, Norway. Switzerland is not part of the EEA, but linked through a series of bilateral agreements. Although the Channel Islands and the Isle of Man are UK Crown dependencies, they are not part of the EU and businesses registered there are subject to different licensing legislation.

European Waste Catalogue (EWC): European Waste Catalogue (EWC 2002 and amendments) – a comprehensive list of waste codes and descriptions based on waste source and type (Commission Decision 2000/532/EC amended by Commission Decisions 2001/118/EC and 2001/119/EC and Council Decision 2001/573/EC).

Factory Production Control: A management system focusing mainly on the production process which aims to ensure that product quality is consistently maintained to the required specifications. Factory Production Control (FPC) for the production of aggregates is specified in BS EN 16236 Evaluation of conformity of aggregates — Initial Type Testing and Factory Production Control.

Inert: Waste is inert if:

(a) it does not undergo any significant physical, chemical or biological transformations;
(b) it does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and
(c) its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater.

Northern Ireland Environment Agency (NIEA): NIEA is the leading public body in Northern Ireland responsible for protecting, conserving and promoting the natural environment and built heritage.

Natural Resources Wales (NRW): NRW is the public body in Wales and its purpose is to ensure that the natural resources of Wales are sustainably maintained, enhanced and used, now and in the future.

PPC permit (Northern Ireland): A permit issued under the Pollution Prevention and Control Regulations (Northern Ireland) S.R. 2003/46. Establishes a pollution control regime for certain installations or mobile plants and includes combustion activities.

Producers: The operator(s) undertaking aggregate processing.

Quality Protocol: A Quality Protocol sets out criteria for the production of a product from a specific waste type. Compliance with these criteria is considered sufficient to ensure that the recovered product can be regarded as having ceased to be waste and that therefore no longer subject to waste management controls. In addition, the Quality Protocol indicates how compliance may be demonstrated and points to good practice for transportation, storage and handling of the recovered product.

Recycled aggregate: Aggregate produced in compliance with the Quality Protocol for the production of aggregate from inert waste (version applicable at the time of production).

Technical Standards and Regulations Directive 98/34/EC: Seeks to ensure the transparency of technical regulations and is intended to help avoid the creation of new technical barriers to trade within the European Community.

User(s): User means construction companies, manufacturers, contractors and all those organisations or individuals responsible for the end use of aggregate.

Waste management controls: Controls under legislation that govern the treatment, handling, containment, transportation storage use and disposal of waste.

Waste management licence or exemption (Northern Ireland): An authorisation issued in Northern Ireland under the Waste Management Licensing Regulations (Northern Ireland) 2003 (as amended), or registered exemption. The Regulations provide for applications in Northern Ireland for waste management licenses authorising the deposit, disposal and treatment of controlled waste. This includes exemptions from waste management licensing.

WRAP (Waste & Resources Action Programme): WRAP's vision is a world without waste, where resources are used sustainably. It works with businesses and individuals to help them reap the benefits of reducing waste, develop sustainable products and use resources in an efficient way.

Appendix B Approved industry standards and Factory Production Control

B1 Approved industry standards

B1.0 The producer must comply with all the requirements of a BS EN aggregates standard appropriate to the use for which the aggregate is destined for at the time it is produced to comply with this Quality Protocol. Table B1 details the standards and main specifications relating to aggregates at the time of publishing this Quality Protocol.

Table B1: Standards, specifications and quality controls for the use of aggregates

Product and Use	Standard	Specification	Quality controls
1 Unbound recycled aggregate: Pipe bedding Drainage	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works (SHW): Series 500 Highway Authorities and Utilities Committee (HAUC): Specification for the reinstatement of openings in highways (SROH)	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
2 Unbound recycled aggregate: Granular fill General fill Capping	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works: Series 600 HAUC: Specification for the reinstatement of openings in highways BS EN 13285: Unbound mixtures: Specifications	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
3 Unbound recycled aggregate: sub base	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works: Series 800 HAUC: Specification for the reinstatement of openings in highways BS EN 13285: Unbound mixtures: Specifications	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW

4 Recycled aggregate for concrete	BS EN 12620: Aggregates for concrete	Highways Agency Specification for Highway Works: Series 1000 BS 8500-2: Concrete	BS EN 12620: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste
5 Recycled aggregate for asphalt	BS EN 13043: Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas	Highways Agency Specification for Highway Works: Series 900 HAUC: Specification for the reinstatement of openings in highways	BS EN 13043: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
6 Recycled aggregate for hydraulically bound mixtures	BS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction	Highways Agency Specification for Highway Works: Series 800 HAUC: Specification for the reinstatement of openings in highways BS EN 14227-1 to 5 Hydraulically Bound Mixtures: Specifications	BS EN 13242: Level 4 Attestation Evaluation of Conformity to BS EN 16236* SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
7 Reclaimed asphalt for use in bituminous mixtures	BS EN 13108-8 Bituminous mixtures – Material specifications – Part 8: Reclaimed asphalt.	Highways Agency Specification for Highway Works: Series 900 BS EN 13108-1 to 5 Bituminous mixtures – Material specifications	BS EN 13108-8 NHSS Sector Scheme 14 SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW

*BS EN 16236 Evaluation of conformity of aggregates – Initial Type Testing and Factory Production Control.

The British Standards Institute (BSI) publishes guidance documents that explain how the European Aggregate Standards are applied within the UK, the ones relevant to table B1 are:

- PD 6682-1 Aggregates for concrete. Guidance on the use of BS EN 12620
- PD 6682-2 Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas. Guidance on the use of BS EN 13043
- PD 6682-6 Aggregates for unbound and hydraulically bound materials for use in civil engineering works and road construction. Guidance on the use of BS EN 13242

All aggregates PDs and BS ENs can be purchased from BSI: http://shop.bsigroup.com

B2 Factory Production Control

B2.0 Production and standards/specification requirements

- Factory Production Control (FPC) must be set up. This is mandatory when producing to BS EN aggregate standards and to this Quality Protocol.
- The requirements set out in B2.1 to B2.9 are complementary to the evaluation of conformity requirements of BS EN 16236, which must be implemented in full.
- The FPC is required to include the following quality management requirements set out below. These, which must be implemented.

B2.1 General points about the procedures

- A FPC manual must be produced which documents how the FPC is implemented and sets out procedures for establishing the approval, issue, distribution and administration of documentation and data for internal and external use.
- A management representative must be nominated as responsible for ensuring the FPC is implemented.
- The FPC must be reviewed periodically by management to ensure its continuing suitability and effectiveness. Records of such reviews must be kept.
- Controls on sub-contractors must be defined.

B2.2 Waste acceptance criteria

- To ensure only inert waste is accepted, the producer must develop ‘acceptance criteria’ specific to each site/location. These criteria must be followed at all times.
- The acceptance criteria must incorporate all statutory requirements relating to the receipt of incoming waste shall be observed and included in the Acceptance Criteria. These requirements include those arising from an environmental permit, waste management licence or a waste exemption, and the duty of care.
- The acceptance criteria must also include:
  - a list of the types of waste that are accepted (including waste codes);
  - source/place of origin of the waste;
  - supplier and transporting agent; and
  - method of acceptance.
- Every load must be inspected visually, both on initial receipt and after tipping, to ensure compliance with the acceptance criteria.
- A procedure for dealing with non-conforming incoming waste must be set up, for example, rejection of loads, quarantine or disposal. Records must be kept of how the procedure has been implemented.

B2.3 Production and testing

- The manner is which processing equipment is maintained and adjusted during production must be defined.
- Input materials must be stocked in a controlled manner in clearly identified locations.
- Material taken from stock for processing must be checked for deterioration.
- The finished product must be identifiable up to the point of sale.
- Procedures must be in place and implemented to maintain the quality of the product during handling, storage, transport and delivery.
- Procedures for the use, control, calibration and maintenance of inspection, measuring and test equipment must be setup and followed. Equipment must be uniquely identified.

B2.4 Training

- All personnel must be trained on the FPC including:
  - acceptance criteria;
  - procedures for non-compliant input wastes and output products;
  - sampling;
  - testing; and
  - inspection.

B2.5 Records

- Records of relevant controls and inspections, calibrations, changes and training must be maintained for a suitable period of time. This period must be defined.

- A Method Statement of Production (MSP) must be produced and maintained. The MSP represents the recovery process for the incoming waste and it is part of the FPC. It must contain a description or representation of the production process for each product type including:
  - input materials;
  - equipment used; and
  - actions undertaken at each stage from acceptance of waste to allocation to product stockpiles.
- The aggregates must be produced to a recognised standard and/or specification. This specification will define the properties and characteristics of the product, as suitable for its application.

B2.6 Documentation

- Delivery documentation must:
  - record the type of aggregate product despatched;
  - state the site at which the product was produced;
  - state that the aggregate was produced under a quality management scheme conforming to the aggregates Quality Protocol.
- If requested, purchasers must be provided with the results from the testing regime undertaken on each product.
- Historical records of test results must be kept and/or made available as summary results (for example, a graph of test results over time).

B2.7 Testing

- Procedures for the use, control, calibration and maintenance of inspection, measuring and test equipment must be set up and followed. Equipment must be uniquely identified.
- A test plan for production must be defined that includes:
  - the type of testing for each product; and
  - sampling and testing frequency (see B2.8 below for information about minimum test frequencies).
- Table B2 provides a summary of the frequencies required for the minimum testing requirements set out in the main standards.
- The test procedures must be appropriate to the end use of the recycled aggregates and testing frequencies must comply with the standards/specifications for the aggregate produced.
- Producers must have in place testing procedures to meet the testing requirements for each product. A summary of the frequencies required for the minimum testing requirements within the mainstream standards is provided in Table B2 (below).
- More detailed testing requirements are defined within the aggregate standards and specifications.

B2.8 Minimum testing requirements – frequencies

- Tables B2 and B4 collate the minimum test frequencies required by common standards and specifications, including the minimum requirements of the FPC for a range of routine tests.
- Frequencies are defined in terms of 'production week' or similar and/or 'production day'. These periods should be defined by the producer depending on the throughput of the plant/equipment.
- Production week can be defined as the period of seven consecutive days comprising at least five production days or the period taken to complete five production days, whichever is longer.

B2.9 Departure from minimum test frequencies

- Where materials are known to be marginal or if initial test results show them as such, the frequency of testing should be increased.
- The producer must prepare a schedule of test frequencies taking into account the minimum requirements of the relevant FPC.
- Under special conditions the test frequencies may be reduced below those given in the FPC annex of the standards. Possible reasons include:
  - highly automated production equipment;
  - long-term experience with consistency of special properties;
  - sources of high conformity; and
  - running a Quality Management System with exceptional measures for surveillance and monitoring of the production process.
- Reasons for reducing test frequencies must be stated in the FPC manual.

Table B2: Summary of testing requirements associated with particular end uses and standards (Note: Testing frequencies should be increased where variability is identified through Factory Production Control and where the measured value is close to the specified limit.)

End use	Standard and Specifications	Test	BS test reference	Minimum test frequency (see B2.8)
All end uses	BS EN 13242 BS EN 12620	Particle size Distribution	EN 933-1	1 per week
		Particle density	EN 1097-6	1 per month
		Resistance to fragmentation (LA)	EN 1097-2	2 per year
		Classification of constituents(see table B3)	EN 933-11	1 per month
		Water soluble sulfate	EN 1744-1	1 per month
Aggregates for concrete	BS EN 12620	Particle density and water absorption	EN 1097-6	1 per month
		Sulfur containing compounds	EN 1744-1	2 per year
		Chlorides	EN 1744-5	2 per year
		Influence on setting time of cement	EN 1744-6	2 per year

Tests listed are not exhaustive and reference should be made to relevant standards and specifications for additional requirements. Tests for BS EN 13043 and additional minimum test frequencies for other aggregate standards are tabled in EN 16236.

Table B3: Classification of constituents: testing to BS EN 933-11, classification groups

Code	Constituents
Rc	Concrete, concrete products, mortar, concrete masonry units
Ru	Unbound aggregate, natural stone, hydraulically bound aggregate
Rb	Clay masonry units (i.e. bricks and tiles), calcium silicate masonry units, aerated non-floating concrete
Ra	Bituminous materials
Rg	Glass
FL	Floating material in volume
X	Cohesive (e.g. clay and soil), metals, wood, plastic, rubber, gypsum plaster

Notes: Maximum permitted for constituent **X**: 1% by mass

Maximum permitted for constituent **FL:** ≤10 cm^3/kg unbound, ≤5 cm^3/kg aggregates for concrete

Table B4: Example of supplementary testing to meet Specification requirements

End Use	Standard and Specifications	Test	BS Test Reference	Minimum test frequency (see section B2.7)
Unbound: Fills Capping Sub-base	SHW Series 600, & 800 SROH	California Bearing Ratio Plasticity of fines Frost Heave	 1377: part 4 1377: part 2 812: part 124	 1 per month 1 per week 1 per year

Tests listed are not exhaustive and reference should be made to relevant standards and specifications for additional requirements.

Appendix C: Wastes considered to be inert waste for the purpose of this Quality Protocol and to be acceptable for the production of recycled aggregates

General restrictions

This QP only applies to aggregates i.e. a granular material used in construction, which is processed from inert waste. For the avoidance of doubt, clays and soils are not considered to be aggregates for the purposes of this Quality Protocol.

C1 Table C1 lists all the input materials and their relevant 'waste code'[3] or European Waste Catalogue (EWC) code considered inert and acceptable for the production of recycled aggregate under this Quality Protocol. The table includes notes to clarify any limits and restrictions relating to specific waste types. Waste inputs must not contain or be contaminated with dangerous substances as described in the List of Wastes (England) Regulations 2005, List of Wastes (Wales) Regulations 2005 and List of Wastes (Northern Ireland) 2005, as amended. Incidental quantities of inert physical contaminants (such as soils, peat, clays, silts, wood, plastics, rubber, metal) may be present with the input material but must be removed during the processing of the waste to comply with the constituent requirements of aggregates standards and table B3 of this Quality Protocol.

Table C1: Acceptable inert waste input materials

Wastes from physical and chemical processing of non-metalliferous minerals

Type and exclusions	Waste code
Waste gravel and crushed rocks other than those mentioned in 01 04 07 May include excavation from mineral workings.	**01 04 08**
Waste sand and clays Waste sand only. Must not include contaminated sand.	**01 04 09**

Wastes from manufacture of glass and glass products

Type and restrictions	Waste code
Waste glass-based fibrous materials Allowed only if: Wastes without organic binders	**10 11 03**

3 'Waste code' refers to the six digit code for a type of waste in accordance with the List of Wastes (England) Regulations 2005, List of Wastes (Wales) Regulations 2005 and List of Wastes (Northern Ireland) Regulations 2005, as amended. Where it refers to hazardous waste, the code includes an asterisk.

Packaging (including separately collected municipal packaging waste)

Type and restrictions	Waste code
Glass packaging	**15 01 07**

Construction and demolition waste – concrete, bricks, tiles and ceramics

Type and restrictions	Waste code
Concrete Must not include concrete slurry.	**17 01 01**
Bricks	**17 01 02**
Tiles and ceramics	**17 01 03**
Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	**17 01 07**

Construction and demolition waste – wood, glass and plastic

Type and restrictions	Waste code
Glass Must not include fibreglass or glass fibre.	**17 02 02**

Construction and demolition waste – bituminous mixtures, coal tar and tarred products

Type and restrictions	Waste code
Bituminous mixtures other than those mentioned in 17 03 01	**17 03 02**
Allowed only if: Bituminous mixtures from the repair and refurbishment of the asphalt layers of roads and other paved areas (excluding bituminous mixtures containing coal tar and classified as waste code 17 03 01). Must not include coal tar or tarred products. Must not include freshly mixed bituminous mixtures.	

Construction and demolition waste – soil (including excavated soil from contaminated sites), stones and dredging spoil

Type and restrictions	Waste code
Soil and stones other than those mentioned in 17 05 03 Must not contain any contaminated soil or stone from contaminated sites.	**17 05 04**
Dredging spoil other than those mentioned in 17 05 05 Allowed only if: Inert aggregate from dredgings. Must not contain contaminated dredgings. Must not contain fines.	**17 05 06**
Track ballast other than those mentioned in 17 05 07	**17 05 08**
Allowed only if: Does not contain soil and stones from contaminated sites.	

Construction and demolition waste – other construction and demolition wastes

Type and restrictions	Waste code
Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	**17 09 04**
Allowed only if: The waste is generated from utilities trenchings. The waste consists of sub base aggregates i.e. granular material. The waste contains only materials that would be described by entries 17 01 01, 17 03 02 and 17 05 04 in this appendix if the waste was not mixed.	

Wastes from the mechanical treatment of waste not otherwise specified (for example sorting, crushing, compacting, pelletising)

Type and restrictions	Waste code
Glass Does not include glass from cathode ray tubes.	**19 12 05**
Minerals (for example sand, stones) Must not contain contaminated concrete, bricks, tiles, sand, stone or gypsum from recovered plasterboard.	**19 12 09**

Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions

Type and restrictions	Waste code
Glass Must not include fibreglass.	**20 01 02**
Garden and park wastes (including cemetery waste) – soil and stones Must not contain contaminated stones from garden and parks waste.	**20 02 02**

Appendix D Good practice for the transportation, storage and use of recycled aggregates

D1 Pollution prevention and environmental good practice

- Follow the pollution prevention guidance developed in partnership with the industry to help those working on construction and demolition sites to prevent pollution.

Pollution Prevention Guidelines PPG6: Working at construction and demolition sites (April 2011), http://publications.environment-agency.gov.uk/pdf/PMHO0410BSGN-e-e.pdf

- Follow the guidance produced by CIRIA which provides practical advice for minimising environmental impacts on construction sites.

CIRIA, Environmental good practice on site (C692)

D2 Health and safety

- All applications of aggregates should comply with recommendations from the Health and Safety Executive (HSE) such as using appropriate personal protective equipment (PPE) and dust suppression measures.

D3 Transportation, storage and handling

- Aggregates should be handled and stored to minimise the creation of airborne dust.
- Engineering control measures such as containment, enclosed silos/bins/hoppers, local exhaust ventilation, sprays suppression systems, etc. should be used where there is a risk of airborne dust creation.
- Open conveyor handling systems should be provided with wind boards or other protection to prevent wind-whipping.
- Manual handling of the aggregates should be minimised through the use of mechanical aids wherever possible. Account should be taken of the Manual Handling Regulations and care should be taken when lifting by hand.
- Aggregates are inert, but dust and fine particles should be prevented from entering watercourses and drains. Deposition of dust on vegetation and surrounding property should be avoided by controlling the release of dust at source.

Waste & Resources Action Programme

October 2013

The Old Academy
21 Horse Fair
Banbury, Oxon
OX16 0AH

Tel: 01295 819 900
Fax: 01295 819 911
E-mail: info@wrap.org.uk
www.wrap.org.uk

Helpline freephone
0808 100 2040

Environment Agency

www.environment-agency.gov.uk
Tel: 08708 506 506
E-mail: enquiries@environment-agency.gov.uk
LIT 8709

recycle